UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2023

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission File Number: 001-39492

JFrog Ltd.

(Exact name of Registrant as specified in its charter)

Israel	**98-0680649**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**

270 E. Caribbean Drive
Sunnyvale, California 94089
(408) 329-1540

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Ordinary Shares, NIS 0.01 par value	**FROG**	**The Nasdaq Global Select Market**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

☒ Large accelerated filer	☐ Accelerated filer
☐ Non-accelerated filer	☐ Smaller reporting company
☐ Emerging growth company	

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of July 31, 2023, the registrant had 103,788,604 ordinary shares, NIS 0.01 par value per share, outstanding.

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NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which statements involve substantial risks and uncertainties. Forward-looking statements generally relate to future events or our future financial or operating performance. In some cases, you can identify forward-looking statements because they contain words such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "estimate," "predict," "potential," or "continue" or the negative of these words or other similar terms or expressions that concern our expectations, strategy, plans, or intentions. Forward-looking statements contained in this Quarterly Report on Form 10-Q include, but are not limited to, statements about:

• our future financial performance, including our expectations regarding our revenue, cost of revenue, gross profit, operating expenses, operating cash flow and free cash flow, and our ability to achieve, and maintain, future profitability;

• market acceptance of our products;

• our expectations about the impact of unfavorable economic conditions, and adverse macroeconomic conditions, such as recent inflation and slower growth or recession, on our business and financial condition;

• the effects of increased competition in our markets and our ability to compete effectively;

• anticipated trends, growth rates and challenges in our business and in the markets in which we operate;

• our expectations about the impact of global economic disruptions resulting from natural disasters, public health epidemics, protests or riots, and geopolitical tensions or war, such as the war in Ukraine, on our business, results of operations and financial condition;

• our ability to maintain and expand our customer base, including by attracting new customers;

• our ability to successfully expand in our existing markets and into new markets;

• our ability to maintain the security and availability of our software;

• our ability to maintain or increase our net dollar retention rate;

• our ability to develop new products, or enhancements to our existing products, and bring them to market in a timely manner;

• our business model and our ability to effectively manage our growth and associated investments;

• our ability to integrate and realize anticipated synergies from acquisitions of complementary businesses;

• beliefs and objectives for future operations, including regarding our market opportunity;

• our relationships with third parties, including our technology partners and cloud providers;

• our ability to maintain, protect, and enhance our intellectual property rights;

• our ability to successfully defend litigation brought against us;

• our ability to attract and retain qualified employees and key personnel;

• the sufficiency of our cash and cash equivalents to meet our liquidity needs;

• our ability to comply with laws and regulations that currently apply or become applicable to our business in Israel, the United States, and internationally; and

• the future trading prices of our ordinary shares.

You should not rely upon forward-looking statements as predictions of future events. We have based the forward-looking statements contained in this Quarterly Report on Form 10-Q primarily on our current expectations and projections about future events and trends that we believe may affect our business, financial condition, results of operations and prospects. The outcome of the events described in these forward-looking statements is subject to risks, uncertainties and other factors described in the section titled "*Risk Factors*" and elsewhere in this Quarterly Report on Form 10-Q. Moreover, we operate in a very competitive and rapidly changing environment. New risks and uncertainties emerge from time to time and it is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained in this Quarterly Report on Form 10-Q. We cannot assure you that the results, events and circumstances reflected in the forward-looking statements will be achieved or occur, and actual results, events or circumstances could differ materially from those described in the forward-looking statements.

The forward-looking statements made in this Quarterly Report on Form 10-Q relate only to events as of the date on which the statements are made. We undertake no obligation to update any forward-looking statements made in this Quarterly Report on Form 10-Q to reflect events or circumstances after the date of this Quarterly Report on Form 10-Q or to reflect new information or the occurrence of unanticipated events. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures, or investments we may make.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this Quarterly Report on Form 10-Q, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

PART I – FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

JFROG LTD.
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share data)
(unaudited)

	As of	
	June 30, 2023	**December 31, 2022**
Assets		
Current assets:		
Cash and cash equivalents	$ 46,694	$ 45,595
Short-term investments	423,100	397,605
Accounts receivable, net	62,498	62,117
Deferred contract acquisition costs	9,063	8,102
Prepaid expenses and other current assets	16,955	18,603
Total current assets	558,310	532,022
Property and equipment, net	7,028	8,021
Deferred contract acquisition costs, noncurrent	14,134	13,501
Operating lease right-of-use assets	27,361	24,602
Intangible assets, net	31,618	37,544
Goodwill	247,955	247,955
Other assets, noncurrent	8,715	7,576
Total assets	$ 895,121	$ 871,221
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable	$ 13,097	$ 14,867
Accrued expenses and other current liabilities	31,724	28,848
Operating lease liabilities	8,272	7,132
Deferred revenue	170,967	158,725
Total current liabilities	224,060	209,572
Deferred revenue, noncurrent	13,441	16,990
Operating lease liabilities, noncurrent	18,241	16,829
Other liabilities, noncurrent	3,487	3,057
Total liabilities	259,229	246,448
Commitments and contingencies (Note 10)		
Shareholders' equity:		
Preferred shares, NIS 0.01 par value per share; 50,000,000 shares authorized; 0 issued and outstanding as of June 30, 2023 and December 31, 2022	—	—
Ordinary shares, NIS 0.01 par value per share, 500,000,000 shares authorized; 103,620,107 and 100,907,857 shares issued and outstanding as of June 30, 2023 and December 31, 2022, respectively	290	283
Additional paid-in capital	904,531	856,438
Accumulated other comprehensive loss	(3,477)	(2,772)
Accumulated deficit	(265,452)	(229,176)
Total shareholders' equity	635,892	624,773
Total liabilities and shareholders' equity	$ 895,121	$ 871,221

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

JFROG LTD.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except share and per share data)
(unaudited)

	Three Months Ended June 30, 2023	Three Months Ended June 30, 2022	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022
Revenue:				
Subscription—self-managed and SaaS	$ 79,467	$ 63,679	$ 154,010	$ 122,748
License—self-managed	4,703	4,128	9,980	8,755
Total subscription revenue	84,170	67,807	163,990	131,503
Cost of revenue:				
Subscription—self-managed and SaaS	18,231	15,024	36,434	28,667
License—self-managed	218	220	436	440
Total cost of revenue—subscription	18,449	15,244	36,870	29,107
Gross profit	65,721	52,563	127,120	102,396
Operating expenses:				
Research and development	33,544	28,945	68,430	56,046
Sales and marketing	36,352	31,991	71,838	61,171
General and administrative	14,732	14,037	28,972	26,728
Total operating expenses	84,628	74,973	169,240	143,945
Operating loss	(18,907)	(22,410)	(42,120)	(41,549)
Interest and other income, net	4,896	517	8,888	790
Loss before income taxes	(14,011)	(21,893)	(33,232)	(40,759)
Income tax expense	1,456	1,880	3,044	2,718
Net loss	$ (15,467)	$ (23,773)	$ (36,276)	$ (43,477)
Net loss per share, basic and diluted	$ (0.15)	$ (0.24)	$ (0.36)	$ (0.44)
Weighted-average shares used in computing net loss per share, basic and diluted	102,512,578	98,955,711	101,890,022	98,422,723

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

JFROG LTD.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(in thousands)
(unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	**2022**	**2023**	**2022**
Net loss	$ (15,467)	$ (23,773)	$ (36,276)	$ (43,477)
Other comprehensive loss, net of tax:				
Unrealized losses on available-for-sale marketable securities, net	(865)	(192)	(293)	(909)
Unrealized losses on derivative instruments, net	(239)	(3,284)	(412)	(4,048)
Other comprehensive loss	(1,104)	(3,476)	(705)	(4,957)
Comprehensive loss	$ (16,571)	$ (27,249)	$ (36,981)	$ (48,434)

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

JFROG LTD.
CONDENSED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(in thousands, except share data)
(unaudited)

	Three Months Ended June 30, 2023					
	Ordinary Shares		Additional Paid-in	Accumulated Other Comprehensive	Accumulated	Total Shareholders'
	Shares	Amount	Capital	Loss	Deficit	Equity
Balance as of March 31, 2023	101,838,543	$ 286	$ 881,002	$ (2,373)	$ (249,985)	$ 628,930
Issuance of ordinary shares upon exercise of share options	555,842	1	2,210	—	—	2,211
Issuance of ordinary shares upon release of restricted share units	1,225,722	3	(3)	—	—	—
Share-based compensation expense	—	—	21,322	—	—	21,322
Other comprehensive loss, net of tax	—	—	—	(1,104)	—	(1,104)
Net loss	—	—	—	—	(15,467)	(15,467)
Balance as of June 30, 2023	103,620,107	$ 290	$ 904,531	$ (3,477)	$ (265,452)	$ 635,892

	Three Months Ended June 30, 2022					
	Ordinary Shares		Additional Paid-in	Accumulated Other Comprehensive	Accumulated	Total Shareholders'
	Shares	Amount	Capital	Loss	Deficit	Equity
Balance as of March 31, 2022	98,641,858	$ 276	$ 795,808	$ (870)	$ (158,696)	$ 636,518
Issuance of ordinary shares upon exercise of share options	438,577	1	1,077	—	—	1,078
Issuance of ordinary shares upon release of restricted share units	202,092	1	(1)	—	—	—
Share-based compensation expense	—	—	15,077	—	—	15,077
Other comprehensive loss, net of tax	—	—	—	(3,476)	—	(3,476)
Net loss	—	—	—	—	(23,773)	(23,773)
Balance as of June 30, 2022	99,282,527	$ 278	$ 811,961	$ (4,346)	$ (182,469)	$ 625,424

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

JFROG LTD.
CONDENSED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(in thousands, except share data)
(unaudited)

	Six Months Ended June 30, 2023					
	Ordinary Shares		Additional Paid-in	Accumulated Other Comprehensive	Accumulated	Total Shareholders'
	Shares	Amount	Capital	Loss	Deficit	Equity
Balance as of December 31, 2022	100,907,857	$ 283	$ 856,438	$ (2,772)	$ (229,176)	$ 624,773
Issuance of ordinary shares upon exercise of share options	907,636	2	3,365	—	—	3,367
Issuance of ordinary shares upon release of restricted share units	1,597,226	4	(4)	—	—	—
Issuance of ordinary shares under the employee share purchase plan	207,388	1	3,498	—	—	3,499
Share-based compensation expense	—	—	41,234	—	—	41,234
Other comprehensive loss, net of tax	—	—	—	(705)	—	(705)
Net loss	—	—	—	—	(36,276)	(36,276)
Balance as of June 30, 2023	103,620,107	$ 290	$ 904,531	$ (3,477)	$ (265,452)	$ 635,892

	Six Months Ended June 30, 2022					
	Ordinary Shares		Additional Paid-in	Accumulated Other Comprehensive	Accumulated	Total Shareholders'
	Shares	Amount	Capital	Income (Loss)	Deficit	Equity
Balance as of December 31, 2021	97,312,040	$ 272	$ 776,690	$ 611	$ (138,992)	$ 638,581
Issuance of ordinary shares upon exercise of share options	1,456,246	4	2,869	—	—	2,873
Issuance of ordinary shares upon release of restricted share units	311,508	1	(1)	—	—	—
Issuance of ordinary shares under the employee share purchase plan	154,550	1	3,252	—	—	3,253
Issuance of ordinary shares related to business combination	48,183	—	—	—	—	—
Share-based compensation expense	—	—	29,151	—	—	29,151
Other comprehensive loss, net of tax	—	—	—	(4,957)	—	(4,957)
Net loss	—	—	—	—	(43,477)	(43,477)
Balance as of June 30, 2022	99,282,527	$ 278	$ 811,961	$ (4,346)	$ (182,469)	$ 625,424

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

JFROG LTD.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(unaudited)

	Six Months Ended June 30,	
	2023	2022
Cash flows from operating activities:		
Net loss	$ (36,276)	$ (43,477)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation and amortization	7,675	7,091
Share-based compensation expense	41,234	29,151
Non-cash operating lease expense	4,145	3,602
Net amortization of premium or discount on investments	(2,870)	2,388
Gain on foreign exchange	(591)	—
Changes in operating assets and liabilities:		
Accounts receivable	(221)	(2,521)
Prepaid expenses and other assets	(1,961)	4,136
Deferred contract acquisition costs	(1,594)	(3,606)
Accounts payable	(1,913)	2,227
Accrued expenses and other liabilities	3,030	5,457
Operating lease liabilities	(3,770)	(5,426)
Deferred revenue	8,693	9,961
Net cash provided by operating activities	15,581	8,983
Cash flows from investing activities:		
Purchases of short-term investments	(204,572)	(181,279)
Maturities and sales of short-term investments	183,171	155,869
Purchases of property and equipment	(773)	(2,131)
Payments related to business combination	—	(179)
Net cash used in investing activities	(22,174)	(27,720)
Cash flows from financing activities:		
Proceeds from exercise of share options	3,367	2,873
Proceeds from employee share purchase plan	3,499	3,253
Proceeds from employee equity transactions, net of payments to tax authorities	817	(495)
Net cash provided by financing activities	7,683	5,631
Effect of exchange rate changes on cash, cash equivalents and restricted cash	9	—
Net increase (decrease) in cash, cash equivalents, and restricted cash	1,099	(13,106)
Cash, cash equivalents, and restricted cash—beginning of period	45,607	68,540
Cash, cash equivalents, and restricted cash—end of period	$ 46,706	$ 55,434
Reconciliation of cash, cash equivalents, and restricted cash within the Condensed Consolidated Balance Sheets to the amounts shown in the Condensed Consolidated Statements of Cash Flows above:		
Cash and cash equivalents	$ 46,694	$ 55,194
Restricted cash included in prepaid expenses and other current assets	12	13
Restricted cash included in other assets, noncurrent	—	227
Total cash, cash equivalents, and restricted cash	$ 46,706	$ 55,434

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

JFROG LTD.
NOTES TO CONDENSED CONSOLIDATED STATEMENTS
(unaudited)

1. Organization and Description of Business

JFrog Ltd. (together with its subsidiaries, “JFrog”, or the “Company”) was incorporated under the laws of the State of Israel in 2008. JFrog provides an end-to-end, hybrid, universal DevOps Platform that powers and controls the software supply chain, enabling organizations to continuously and securely deliver software updates across any system. JFrog’s platform is the critical bridge between software development and deployment of that software, paving the way for the modern DevOps paradigm. The Company enables organizations to build and release software faster and more securely while empowering developers to be more efficient. The Company’s solutions are designed to run on-premise, in public or private clouds, or in hybrid environments.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”), and applicable rules and regulations of the Securities and Exchange Commission (“SEC”) regarding interim financial reporting, and include the accounts of JFrog Ltd. and its wholly owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

The condensed consolidated balance sheet as of December 31, 2022 was derived from the audited consolidated financial statements as of that date, but does not include all of the disclosures, including certain notes required by GAAP on an annual reporting basis. Certain information and note disclosures normally included in the financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to such rules and regulations. Therefore, these unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and the related notes thereto as of and for the year ended December 31, 2022, included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2022 filed with the SEC on February 9, 2023.

In management’s opinion, the unaudited condensed consolidated financial statements have been prepared on the same basis as the annual consolidated financial statements and reflect all adjustments, which include only normal recurring adjustments necessary for the fair presentation of the Company’s financial position as of June 30, 2023 and the Company’s consolidated results of operations and shareholders’ equity for the three and six months ended June 30, 2023 and 2022, and cash flows for the six months ended June 30, 2023 and 2022. The results for the three and six months ended June 30, 2023 are not necessarily indicative of the results to be expected for the full year ending December 31, 2023 or any other future interim or annual period.

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenue and expenses during the reporting periods and accompanying notes. Significant items subject to such estimates and assumptions include, but are not limited to, the allocation of transaction price among various performance obligations, the estimated customer life on deferred contract acquisition costs, the allowance for credit losses, the fair value of financial assets and liabilities, including the fair value of derivatives, the fair value of acquired intangible assets and goodwill, the useful lives of acquired intangible assets and property and equipment, the incremental borrowing rate for operating leases, loss contingency, the fair value of share purchase rights granted under the Company’s employee share purchase plan, and the valuation of deferred tax assets and uncertain tax positions. The Company bases these estimates on historical and anticipated results, trends and various other assumptions that it believes are reasonable under the circumstances, including assumptions as to future events. Actual results could differ from those estimates.

Significant Accounting Policies

The Company’s significant accounting policies are discussed in Note 2, *Summary of Significant Accounting Policies,* in the Company’s Annual Report on Form 10-K for the year ended December 31, 2022. There have been no significant changes to these policies during the six months ended June 30, 2023.

Interest and Other Income, Net

Interest and other income, net primarily consists of income earned on cash equivalents and short-term investments and foreign exchange gains and losses. Interest income was $5.1 million and $0.8 million for the three months ended June 30, 2023 and 2022, respectively and $9.5 million and $1.2 million for the six months ended June 30, 2023 and 2022, respectively. Foreign exchange gains (losses) were not material for the periods presented.

Geographical Information

Revenue by geographical region can be found in Note 3, *Revenue Recognition*. The following table presents the Company's long-lived assets by geographic region, which consist of property and equipment, net and operating lease right-of-use assets:

	June 30, 2023	December 31, 2022
	(in thousands)	
United States	$ 9,925	$ 11,569
Israel	19,241	17,887
India	4,535	2,246
Rest of world	688	921
Total long-lived assets	$ 34,389	$ 32,623

3. Revenue Recognition

Disaggregation of Revenue

The following table presents revenue by category:

	Three Months Ended June 30,				Six Months Ended June 30,			
	2023		2022		2023		2022	
	Amount	Percentage of Revenue	Amount	Percentage of Revenue	Amount	Percentage of Revenue	Amount	Percentage of Revenue
	(in thousands, except percentages)							
Self-managed subscription	$ 56,530	67 %	$ 48,569	72 %	$ 111,310	68 %	$ 95,491	73 %
Subscription	51,827	61	44,441	66	101,330	62	86,736	66
License	4,703	6	4,128	6	9,980	6	8,755	7
SaaS	27,640	33	19,238	28	52,680	32	36,012	27
Total subscription revenue	$ 84,170	100 %	$ 67,807	100 %	$ 163,990	100 %	$ 131,503	100 %

The following table summarizes revenue by region based on the shipping address of customers:

	Three Months Ended June 30,				Six Months Ended June 30,			
	2023		2022		2023		2022	
	Amount	Percentage of Revenue	Amount	Percentage of Revenue	Amount	Percentage of Revenue	Amount	Percentage of Revenue
	(in thousands, except percentages)							
United States	$ 51,739	61 %	$ 43,022	63 %	$ 101,278	62 %	$ 82,739	63 %
Israel	2,231	3	1,712	3	4,274	3	3,335	3
Rest of world	30,200	36	23,073	34	58,438	35	45,429	34
Total subscription revenue	$ 84,170	100 %	$ 67,807	100 %	$ 163,990	100 %	$ 131,503	100 %

Contract Balances

Of the $178.4 million and $152.4 million of deferred revenue recorded as of March 31, 2023 and 2022, respectively, the Company recognized $64.8 million and $51.6 million as revenue during the three months ended June 30, 2023 and 2022, respectively. Of the $175.7 million and $147.1 million of deferred revenue recorded as of December 31, 2022 and 2021, respectively, the Company recognized $111.8 million and $85.6 million as revenue during the six months ended June 30, 2023 and 2022, respectively.

Remaining Performance Obligation

The Company's remaining performance obligations are comprised of product and service revenue not yet delivered. As of June 30, 2023, the aggregate amount of the transaction price allocated to remaining performance obligations was $213.6 million, which consists of billed considerations of $184.4 million and unbilled considerations of $29.2 million, that the Company expects to recognize as revenue. As of June 30, 2023, the Company expects to recognize 85% of its remaining performance obligations as revenue over the next 12 months, and the remainder thereafter.

Cost to Obtain a Contract

Amortization of deferred contract acquisition costs was $2.4 million and $1.7 million for the three months ended June 30, 2023 and 2022, respectively, and $4.6 million and $3.2 million for the six months ended June 30, 2023 and 2022, respectively.

4. Short-Term Investments

Short-term investments consisted of the following:

	June 30, 2023			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
	(in thousands)			
Bank deposits	$ 105,205	$ —	$ —	$ 105,205
Certificates of deposit	2,456	—	(54)	2,402
Commercial paper	33,900	—	(67)	33,833
Corporate debt securities	130,162	64	(956)	129,270
Municipal securities	35,421	—	(208)	35,213
Government and agency debt	117,929	—	(752)	117,177
Marketable securities	319,868	64	(2,037)	317,895
Total short-term investments	$ 425,073	$ 64	$ (2,037)	$ 423,100

	December 31, 2022			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
	(in thousands)			
Bank deposits	$ 96,034	$ —	$ —	$ 96,034
Certificates of deposit	2,204	—	(51)	2,153
Commercial paper	38,164	2	(137)	38,029
Corporate debt securities	137,191	41	(859)	136,373
Municipal securities	38,543	23	(222)	38,344
Government and agency debt	87,149	7	(484)	86,672
Marketable securities	303,251	73	(1,753)	301,571
Total short-term investments	$ 399,285	$ 73	$ (1,753)	$ 397,605

The following table summarizes the Company's marketable securities by contractual maturities:

	June 30, 2023 (in thousands)
Due in 1 year or less	$ 249,687
Due in 1 year through 2 years	68,208
Total	$ 317,895

The following table presents fair value and gross unrealized losses of the Company's marketable securities that have been in a continuous loss position, aggregated by length of time:

	June 30, 2023					
	Less Than 12 Months		12 Months or Greater		Total	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
	(in thousands)					
Certificates of deposit	$ 497	$ (8)	$ 1,905	$ (46)	$ 2,402	$ (54)
Commercial paper	33,833	(67)	—	—	33,833	(67)
Corporate debt securities	110,367	(869)	6,923	(87)	117,290	(956)
Municipal securities	26,500	(187)	2,999	(21)	29,499	(208)
Government and agency debt	106,165	(718)	5,512	(34)	111,677	(752)
Total	$ 277,362	$ (1,849)	$ 17,339	$ (188)	$ 294,701	$ (2,037)

	December 31, 2022					
	Less Than 12 Months		12 Months or Greater		Total	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
	(in thousands)					
Certificates of deposit	$ 2,153	$ (51)	$ —	$ —	$ 2,153	$ (51)
Commercial paper	31,838	(137)	—	—	31,838	(137)
Corporate debt securities	123,540	(859)	—	—	123,540	(859)
Municipal securities	25,336	(222)	—	—	25,336	(222)
Government and agency debt	71,781	(484)	—	—	71,781	(484)
Total	$ 254,648	$ (1,753)	$ —	$ —	$ 254,648	$ (1,753)

As of June 30, 2023 and December 31, 2022, the unrealized losses related to marketable securities were determined to be not due to credit related losses. Therefore, the Company did not recognize an allowance for credit losses. See Note 12, *Accumulated Other Comprehensive Income (Loss)*, for the realized gains or losses from available-for-sale marketable securities that were reclassified out of accumulated other comprehensive income (loss) ("AOCI") during the periods presented.

5. Fair Value Measurements

The following table presents information about the Company's financial instruments that are measured at fair value on a recurring basis:

	June 30, 2023		
	Fair Value	Level 1	Level 2
	(in thousands)		
Financial Assets:			
Money market funds	$ 19,569	$ 19,569	$ —
Commercial paper	993	—	993
Cash equivalents	20,562	19,569	993
Bank deposits	105,205	—	105,205
Certificates of deposit	2,402	—	2,402
Commercial paper	33,833	—	33,833
Corporate debt securities	129,270	—	129,270
Municipal securities	35,213	—	35,213
Government and agency debt	117,177	—	117,177
Short-term investments	423,100	—	423,100
Foreign currency contracts designated as hedging instruments included in prepaid expenses and other current assets	34	—	34
Foreign currency contracts not designated as hedging instruments included in prepaid expenses and other current assets	251	—	251
Restricted bank deposits included in prepaid expenses and other current assets	12	—	12
Total financial assets	$ 443,959	$ 19,569	$ 424,390
Financial Liabilities:			
Foreign currency contracts designated as hedging instruments included in accrued expenses and other current liabilities	$ 1,524	$ —	$ 1,524
Foreign currency contracts not designated as hedging instruments included in accrued expenses and other current liabilities	505	—	505
Total financial liabilities	$ 2,029	$ —	$ 2,029

	December 31, 2022 (in thousands)					
	Fair Value		Level 1		Level 2	
Financial Assets:						
Money market funds	$	9,562	$	9,562	$	—
Cash equivalents		9,562		9,562		—
Bank deposits		96,034		—		96,034
Certificates of deposit		2,153		—		2,153
Commercial paper		38,029		—		38,029
Corporate debt securities		136,373		—		136,373
Municipal securities		38,344		—		38,344
Government and agency debt		86,672		—		86,672
Short-term investments		397,605		—		397,605
Foreign currency contracts designated as hedging instruments included in prepaid expenses and other current assets		20		—		20
Foreign currency contracts not designated as hedging instruments included in prepaid expenses and other current assets		21		—		21
Restricted bank deposits included in prepaid expenses and other current assets		12		—		12
Total financial assets	$	407,220	$	9,562	$	397,658
Financial Liabilities:						
Foreign currency contracts designated as hedging instruments included in accrued expenses and other current liabilities	$	1,098	$	—	$	1,098
Foreign currency contracts not designated as hedging instruments included in accrued expenses and other current liabilities		379		—		379
Total financial liabilities	$	1,477	$	—	$	1,477

The Company classifies its money market fund within Level 1 of the fair value hierarchy because they are valued based on quoted market prices in active markets. The Company classifies its bank deposits, certificates of deposit, commercial paper, corporate debt securities, municipal securities, government and agency debt, and derivative financial instruments within Level 2 because they are valued using inputs other than quoted prices which are directly or indirectly observable in the market, including readily-available pricing sources for the identical underlying security which may not be actively traded. As of June 30, 2023 and December 31, 2022, the Company did not have any assets or liabilities valued based on Level 3 valuations.

6. Derivative Financial Instruments and Hedging

The Company enters into foreign currency forward and option contracts with financial institutions to protect against foreign exchange risks, mainly the exposure to changes in the exchange rate of the New Israeli Shekel ("NIS") against the U.S. dollar that are associated with forecasted future cash flows and certain existing assets and liabilities for up to twelve months. The Company's primary objective in entering into these contracts is to reduce the volatility of earnings and cash flows associated with changes in foreign currency exchange rates. The Company does not use derivative instruments for trading or speculative purposes.

Notional Amount of Foreign Currency Contracts

The notional amounts of outstanding foreign currency contracts in U.S. dollar as of the periods presented were as follows:

	June 30, 2023		December 31, 2022	
	(in thousands)			
Derivatives Designated as Hedging Instruments:				
Foreign currency contracts	$	54,903	$	42,854
Derivatives Not Designated as Hedging Instruments:				
Foreign currency contracts		21,963		17,555
Total derivative instruments	$	76,866	$	60,409

Effect of Foreign Currency Contracts on the Condensed Consolidated Statements of Operations

Derivative instruments that hedge the exposure to variability in expected future cash flows are designated as cash flow hedges. The Company records changes in the fair value of these derivatives in AOCI in the Condensed Consolidated Balance Sheets, until the forecasted transaction occurs. Upon occurrence, the Company reclassifies the related gains or losses on the derivative to the same financial statement line item in the Condensed Consolidated Statements of Operations to which the derivative relates. In case the Company discontinues cash flow hedges, it records the related amount in interest and other income, net, on the Condensed Consolidated Statements of Operations. Derivative instruments that hedge the exposure to variability in the fair value of assets or liabilities are currently not designated as hedges for financial reporting purposes. The Company records changes in the fair value of these derivatives in interest and other income, net in the Condensed Consolidated Statements of Operations.

The losses on foreign currency contracts were presented on the Condensed Consolidated Statements of Operations during the periods presented as follows:

	Derivatives Designated as Hedging Instruments				Derivatives Not Designated as Hedging Instruments			
	Three Months Ended June 30,		Six Months Ended June 30,		Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022	2023	2022	2023	2022
Condensed Statement of Operations Location:	(in thousands)							
Cost of revenue: subscription–self-managed and SaaS	$ (94)	$ (121)	$ (181)	$ (127)	$ —	$ —	$ —	$ —
Research and development	(805)	(854)	(1,493)	(909)	—	—	—	—
Sales and marketing	(188)	(191)	(340)	(202)	—	—	—	—
General and administrative	(215)	(235)	(396)	(250)	—	—	—	—
Interest and other income, net	—	—	—	8	(414)	(422)	(819)	(400)
Total losses recognized in earnings	$ (1,302)	$ (1,401)	$ (2,410)	$ (1,480)	$ (414)	$ (422)	$ (819)	$ (400)

Effect of Foreign Currency Contracts on Accumulated Other Comprehensive Income

Net unrealized gains (losses) of foreign currency contracts designated as hedging instruments, net of tax, are recorded in AOCI. See Note 12, *Accumulated Other Comprehensive Income (Loss)*, for the effect on other comprehensive income (loss) and the reclassification out of AOCI during the periods presented. All of net deferred losses in AOCI as of June 30, 2023 are expected to be recognized as operating expenses in the same financial statement line item in the Condensed Consolidated Statements of Operations to which the derivative relates over the next twelve months.

7. Condensed Consolidated Balance Sheet Components

Property and Equipment, Net

Property and equipment, net consisted of the following:

	June 30, 2023	December 31, 2022
	(in thousands)	
Computer and software	$ 8,830	$ 8,330
Furniture and office equipment	3,026	2,802
Leasehold improvements	5,780	5,748
Property and equipment, gross	17,636	16,880
Less: accumulated depreciation and amortization	(10,608)	(8,859)
Property and equipment, net	$ 7,028	$ 8,021

Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following:

	June 30, 2023	December 31, 2022
	(in thousands)	
Accrued compensation and benefits	$ 20,717	$ 20,892
Accrued expenses	11,007	7,956
Accrued expenses and other current liabilities	$ 31,724	$ 28,848

8. Intangible Assets, Net

Intangible assets consisted of the following as of June 30, 2023:

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted-Average Remaining Useful Life
		(in thousands)		(in years)
Developed technology	$ 50,347	$ (22,644)	$ 27,703	2.8
Customer relationships	5,541	(2,313)	3,228	3.6
Other intangible assets	1,132	(445)	687	1.4
Total	$ 57,020	$ (25,402)	$ 31,618	

Intangible assets consisted of the following as of December 31, 2022:

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted-Average Remaining Useful Life
		(in thousands)		(in years)
Developed technology	$ 50,347	$ (17,434)	$ 32,913	3.3
Customer relationships	5,541	(1,840)	3,701	4.1
Other intangible assets	1,132	(202)	930	1.9
Total	$ 57,020	$ (19,476)	$ 37,544	

Amortization expenses for intangible assets were $3.0 million and $2.8 million for the three months ended June 30, 2023 and 2022, respectively, and $5.9 million and $5.7 million for the six months ended June 30, 2023 and 2022, respectively.

The expected future amortization expenses by year related to the intangible assets as of June 30, 2023 are as follows:

	June 30, 2023
	(in thousands)
Year Ending December 31,	
2023 (Remainder)	$ 5,850
2024	11,034
2025	9,110
2026	5,241
2027	383
Total	$ 31,618

9. Leases

The Company has entered into non-cancelable lease agreements for its offices with lease periods expiring at various dates through March 2028.

Components of operating lease expense were as follows:

	Three Months Ended June 30, 2023	Three Months Ended June 30, 2022	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022
	(in thousands)			
Operating lease cost	$ 2,312	$ 1,891	$ 4,493	$ 3,751
Short-term lease cost	202	167	314	255
Variable lease cost	110	100	206	192
Total operating lease cost	$ 2,624	$ 2,158	$ 5,013	$ 4,198

Supplementary cash flow information related to operating leases was as follows:

	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022
	(in thousands)	
Cash paid for operating leases	$ 4,119	$ 3,770
ROU assets obtained in exchange for new operating lease liabilities	$ 2,867	$ 1,236
Adjustment to ROU assets upon modification of existing lease	$ 4,037	$ 1,952

As of June 30, 2023, the weighted-average discount rate is 3.2% and the weighted-average remaining term is 3.3 years. Maturities of the Company's operating lease liabilities as of June 30, 2023 were as follows:

	June 30, 2023 (in thousands)
Year Ending December 31,	
2023 (Remainder)	$ 4,438
2024	8,884
2025	8,116
2026	4,829
2027	1,627
Thereafter	156
Total operating lease payments	28,050
Less: imputed interest	(1,537)
Total operating lease liabilities	$ 26,513

10. Commitments and Contingencies

Non-cancelable Purchase Obligations

In the normal course of business, the Company enters into non-cancelable purchase commitments with various parties mainly for hosting services, as well as software products and services. As of June 30, 2023, the Company had outstanding non-cancelable purchase obligations with a term of 12 months or longer as follows:

	June 30, 2023 (in thousands)
Year Ending December 31,	
2023 (Remainder)	$ 1,786
2024	20,528
2025	21,854
2026	108
Total	$ 44,276

Indemnifications and Contingencies

The Company enters into indemnification provisions under certain agreements with other parties in the ordinary course of business. In its customer agreements, the Company has agreed to indemnify, defend and hold harmless the indemnified party for third party claims and related losses suffered or incurred by the indemnified party from actual or threatened third-party intellectual property infringement claims. For certain large or strategic customers, the Company has agreed to indemnify, defend and hold harmless the indemnified party for certain additional matters including but not limited to non-compliance with certain representations and warranties made by the Company.

Grants from Israeli Innovation Authority

The Company has received in the past grants from the Israeli Innovation Authority ("IIA") and repaid them in full. Still, as any grant recipient, the Company is subject to the provisions of the Israeli Law for the Encouragement of Research, Development and Technological Innovation in the Industry and the regulations and guidelines thereunder (the "Innovation Law"). Pursuant to the Innovation Law, there are restrictions related to transferring intellectual property outside of Israel. Such transfer requires the approval from the IIA. The approval may be subject to a maximum additional payment amount of approximately $6.0 million. In the past, the Company received an approval from the IIA to perform a limited development of IIA funded know-how outside of Israel, subject to the terms specified in the IIA approval, including that all of its core R&D activities will remain in Israel.

Legal Proceedings

In the ordinary course of business, the Company may be subject from time to time to various proceedings, lawsuits, disputes, or claims. The Company investigates these claims as they arise. Although claims are inherently unpredictable, the Company is currently not aware of any matters that, if determined adversely to the Company, would individually or taken together, have a material adverse effect on its business, financial position, results of operations, or cash flows.

11. Shareholders' Equity and Equity Incentive Plans

Equity Incentive Plans

Effective January 1, 2023, the number of ordinary shares authorized for issuance under the 2020 Equity Incentive Plan (the "2020 Plan") automatically increased by 5,819,265 shares pursuant to the terms of the 2020 Plan.

Share Options

A summary of share option activity under the Company's equity incentive plans and related information is as follows:

	Options Outstanding			
	Outstanding Share Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
	(in thousands, except share, life and per share data)			
Balance as of December 31, 2022	7,205,324	$ 7.88	5.4	$ 101,334
Exercised	(907,636)	$ 3.71		$ 17,244
Forfeited	(95,011)	$ 13.75		
Balance as of June 30, 2023	6,202,677	$ 8.40	5.0	$ 121,590
Exercisable as of June 30, 2023	4,950,498	$ 6.33	4.6	$ 106,673

Restricted Share Units

A summary of restricted share units ("RSU") activity under the Company's equity incentive plan and related information is as follows, including RSUs with a market-based condition for which the fair value was determined using a Monte Carlo simulation model:

	RSUs		
	Unvested RSUs		**Weighted-Average Grant Date Fair Value Per Share**
Unvested as of December 31, 2022	7,981,147	$	26.90
Granted	2,666,187	$	21.45
Vested	(1,597,226)	$	26.20
Forfeited	(657,012)	$	25.53
Unvested as of June 30, 2023	8,393,096	$	25.41

The total release date fair value of RSUs was $37.9 million during the six months ended June 30, 2023.

Employee Share Purchase Plan

Effective January 1, 2023, the number of ordinary shares authorized for issuance under the 2020 Employee Share Purchase Plan ("ESPP") automatically increased by 1,009,633 shares pursuant to the terms of ESPP.

Shares Reserved for Future Issuance

The Company has the following ordinary shares reserved for future issuance:

	June 30, 2023
Outstanding share options	6,202,677
Outstanding RSUs	8,393,096
Issuable ordinary shares related to business combinations	55,466
Shares available for future issuance under the 2020 Plan	17,014,187
Shares available for future issuance under ESPP	4,443,395
Total ordinary shares reserved	36,108,821

Share-Based Compensation

The share-based compensation expense by line item in the accompanying condensed consolidated statements of operations is summarized as follows:

	Three Months Ended June 30,				Six Months Ended June 30,			
	2023		2022		2023		2022	
	(in thousands)							
Cost of revenue: subscription–self-managed and SaaS	$	2,019	$	1,613	$	4,215	$	2,919
Research and development		7,798		5,330		14,970		10,462
Sales and marketing		6,740		4,792		13,213		9,547
General and administrative		4,765		3,342		8,836		6,223
Total share-based compensation expense	$	21,322	$	15,077	$	41,234	$	29,151

As of June 30, 2023, unrecognized share-based compensation cost related to unvested share-based compensation awards was $212.4 million, which is expected to be recognized over a weighted-average period of 2.9 years.

12. Accumulated Other Comprehensive Income (Loss)

The following table summarizes the changes in AOCI by component, net of tax, during the periods presented:

	Net Unrealized Losses on Available-for-Sale Marketable Securities	Net Unrealized Losses on Derivatives Designated as Hedging Instruments	Total
		(in thousands)	
Balance as of December 31, 2022	$ (1,694)	$ (1,078)	$ (2,772)
Other comprehensive loss before reclassifications	(455)	(2,822)	(3,277)
Net realized losses reclassified from AOCI	162	2,410	2,572
Other comprehensive loss	(293)	(412)	(705)
Balance as of June 30, 2023	$ (1,987)	$ (1,490)	$ (3,477)

	Net Unrealized Losses on Available-for-Sale Marketable Securities	Net Unrealized Gains (Losses) on Derivatives Designated as Hedging Instruments	Total
		(in thousands)	
Balance as of December 31, 2021	$ (264)	$ 875	$ 611
Other comprehensive loss before reclassifications	(908)	(5,528)	(6,436)
Net realized losses (gains) reclassified from AOCI	(1)	1,480	1,479
Other comprehensive loss	(909)	(4,048)	(4,957)
Balance as of June 30, 2022	$ (1,173)	$ (3,173)	$ (4,346)

13. Income Taxes

The Company's quarterly tax provision and estimates of its annual effective tax rate are subject to variation due to several factors, including variability in pre-tax income (or loss), the mix of jurisdictions to which such income relates, tax law developments, as well as non-deductible expenses, such as share-based compensation, and changes in its valuation allowance. Income tax expense was $1.5 million and $1.9 million for the three months ended June 30, 2023 and 2022, respectively, and $3.0 million and $2.7 million for the six months ended June 30, 2023 and 2022, respectively. The income tax expense for the periods consisted primarily of income taxes related to the Company's U.S. operations.

A valuation allowance is provided when it is more likely than not that the deferred tax assets will not be realized. Based on the available objective evidence during six months ended June 30, 2023, the Company believes it is more likely than not that the tax benefits of the Company's losses incurred in Israel may not be realized.

Gross unrecognized tax benefits were $4.8 million as of June 30, 2023 and December 31, 2022. As of June 30, 2023, the Company does not expect its unrecognized tax benefits to change significantly within the next twelve months.

14. Net Loss Per Share

The following table sets forth the computation of basic and diluted net loss per share for the periods presented:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(in thousands, except share and per share data)			
Numerator:				
Net loss	$ (15,467)	$ (23,773)	$ (36,276)	$ (43,477)
Denominator:				
Weighted-average shares used in computing net loss per share, basic and diluted	102,512,578	98,955,711	101,890,022	98,422,723
Net loss per share, basic and diluted	$ (0.15)	$ (0.24)	$ (0.36)	$ (0.44)

The potential shares of ordinary shares that were excluded from the computation of diluted net loss per share for the periods presented because including them would have been anti-dilutive are as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Outstanding share options	6,504,444	8,362,407	6,763,415	8,851,537
Unvested RSUs	8,467,120	5,023,261	8,260,848	4,372,362
Share purchase rights under the ESPP	184,891	119,669	191,078	130,185
Issuable ordinary shares related to business combination	55,466	110,932	55,466	126,638
Total	15,211,921	13,616,269	15,270,807	13,480,722

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our condensed consolidated financial statements and the related notes thereto included elsewhere in this Quarterly Report on Form 10-Q and in our Annual Report on Form 10-K for the year ended December 31, 2022, filed with the SEC on February 9, 2023, or our Annual Report. As discussed in the section titled "Note Regarding Forward-Looking Statements," the following discussion and analysis contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those discussed below. Factors that could cause or contribute to such differences include, but are not limited to, those identified below and those discussed in the section titled "Risk Factors" under Part II, Item 1A in this Quarterly Report on Form 10-Q and under Part I, Item IA in our Annual Report.

Overview

JFrog's vision is to power a world of continuously updated, version-less software—we call this Liquid Software.

We provide an end-to-end, hybrid, universal DevOps Platform that powers and controls the software supply chain, enabling organizations to continuously and securely deliver software updates across any system. This platform is the critical bridge between software development and deployment of that software, paving the way for the modern DevOps paradigm. We enable organizations to build and release software faster and more securely while empowering developers to be more efficient.

We have designed our subscription structure and go-to-market strategy to align our growth with the success of our customers. Our business model benefits from our ability to serve the needs of all customers, from individual software developers, security teams, and IT operators to the largest organizations, in a value-oriented manner. All references to our customers included in this Quarterly Report on Form 10-Q refer to paying customers.

We generate revenue from the sale of subscriptions to customers. We offer subscription tiers for self-managed deployments, where our customers deploy and manage our products across their public cloud, on-premise, private cloud, or hybrid environments, as well as JFrog-managed public cloud deployments, which we refer to as our SaaS subscriptions. Revenue from SaaS subscriptions contributed 33% and 32% of our total revenue for the three and six months ended June 30, 2023, respectively, compared to 28% and 27% for the corresponding periods in 2022, respectively.

Our self-managed subscriptions are offered on an annual and multi-year basis, and our SaaS subscriptions are offered on a monthly, annual, and multi-year basis. Revenue from subscriptions that provide our customers with access to multiple products represented approximately 95% of our total revenue for the three and six months ended June 30, 2023, compared to approximately 94% for the corresponding periods in 2022. Revenue from Enterprise Plus subscription represented approximately 45% of our total revenue for the three and six months ended June 30, 2023, compared to approximately 36% for the corresponding periods in 2022. The growth in revenue from our Enterprise Plus subscription demonstrates the increased demand for our end-to-end solutions for customers' entire software supply chain management.

We have an unwavering commitment to the software developer, security and IT operator communities, and show this commitment by offering varying forms of free access to our products in addition to the paid subscriptions described above. This free access takes the form of freemium offerings, free trials, and open source software, and helps generate demand for our paid offerings within the software developer, security, and IT operator communities.

We generated revenue of $84.2 million and $67.8 million for the three months ended June 30, 2023 and 2022, respectively, representing 24% growth, and $164.0 million and $131.5 million for the six months ended June 30, 2023 and 2022, respectively, representing 25% growth. We have continued to invest in our business and had a net loss of $15.5 million and $23.8 million for the three months ended June 30, 2023 and 2022, respectively, and $36.3 million and $43.5 million for the six months ended June 30, 2023 and 2022, respectively.

Factors Affecting Our Performance

We believe that our future performance will depend on many factors, including the following:

Extending Our Technology Leadership

We intend to continue to enhance our platform by developing new products and expanding the functionality of existing products to maintain our technology leadership. Today, with JFrog Artifactory at its center, our platform is comprised of additional security solutions and the connected device management solution. We have continued to invest in innovation and introduce new products and capabilities. For instance, in July 2023, we released JFrog Curation, a solution that prevents malicious open source or third-party software packages and their respective dependencies from entering an organization's software development environment.

We invest heavily in integrating our products with the major package technologies so that our products can be easily adopted in any development environment. We believe that these integrations increase the value of our platform to our customers, as they provide freedom of choice for software developers, security and IT operators and help avoid vendor lock-in. We intend to expend additional resources in the future to continue introducing new products, features, and functionality.

Expanding Usage by Existing Customers

We believe that there is a significant opportunity for growth with many of our existing customers. Many customers purchase our products through self-service channels and often materially expand their usage over time. Increased engagement with our products provides our support and customer success teams opportunities to work directly with customers and introduce them to additional products and features, as well as drive usage of our products across large teams and more broadly across organizations. Furthermore, we see expansion opportunities when customers migrate from self-managed subscriptions to SaaS solutions because customers have generally increased their platform usage levels after migration. We will continue to expand our strategic team to identify new use cases and drive expansion and standardization on JFrog within our largest customers, to maintain engineering-level customer support, and to introduce new products and features that are responsive to our customers' needs.

We quantify our expansion across existing customers through our net dollar retention rate. Our net dollar retention rate compares our annual recurring revenue ("ARR") from the same set of customers across comparable periods. We define ARR as the annualized revenue run-rate of subscription agreements from all customers as of the last month of the quarter. The ARR includes monthly subscription customers so long as we generate revenue from these customers. We annualize our monthly subscriptions by taking the revenue we would contractually expect to receive from such customers in a given month and multiplying it by 12. We calculate net dollar retention rate by first identifying customers (the "Base Customers"), which were customers in the last month of a particular quarter (the "Base Quarter"). We then calculate the contracted ARR from these Base Customers in the last month of the same quarter of the subsequent year (the "Comparison Quarter"). This calculation captures upsells, contraction, and attrition since the Base Quarter. We then divide total Comparison Quarter ARR by total Base Quarter ARR for Base Customers. Our net dollar retention rate in a particular quarter is obtained by averaging the result from that particular quarter with the corresponding results from each of the prior three quarters. Our net dollar retention rate may fluctuate as a result of a number of factors, including the level of penetration within our customer base, expansion of products and features, and our ability to retain our customers. As of June 30, 2023 and 2022, our net dollar retention rate was 120% and 130%, respectively. We started experiencing slower expansion across existing customers towards the end of fiscal 2022. We expect our net dollar retention rate to stabilize around current levels.

We focus on growing the number of large customers as a measure of our ability to scale with our customers and attract larger organizations to adopt our products. As of June 30, 2023, 813 of our customers had ARR of $100,000 or more, increasing from 736 customers as of December 31, 2022. We had 24 customers with ARR of at least $1.0 million as of June 30, 2023, increasing from 19 customers as of December 31, 2022.

Acquiring New Customers

We believe there is a significant opportunity to grow the number of customers that use our platform. Our results of operations and growth prospects will depend in part on our ability to attract new customers. To date, we have primarily relied on our self-service and inbound sales model to attract new customers. Prospective customers can evaluate and adopt our products through our freemium offerings, free trials, and open source software options. The costs associated with providing these freemium offerings, free trials, and open source software options are included in sales and marketing. While we believe we have a significant market opportunity that our platform addresses, we will need to continue to invest in customer support, sales and marketing, and research and development in order to address this opportunity.

Additionally, we believe our products address the software release needs of customers worldwide, and we see international expansion as a major opportunity. We have been operating and selling our products in international markets since our inception. While we believe global demand for our products will continue to increase as international market awareness of our brand grows, our ability to conduct our operations internationally will require considerable management attention and resources and is subject to the particular challenges of supporting a rapidly growing business in an environment of multiple languages, cultures, customs, legal and regulatory systems, alternative dispute systems, and commercial markets.

Non-GAAP Financial Measures

In addition to our results determined in accordance with GAAP, we believe that free cash flow, a non-GAAP financial measure, is useful in evaluating the performance of our business.

Free Cash Flow

Free cash flow is a non-GAAP financial measure that we calculate as net cash provided by operating activities less purchases of property and equipment. We believe this is a useful indicator of liquidity that provides information to management and investors about the amount of cash generated from our core operations that, after the purchases of property and equipment, can be used for strategic initiatives, including investing in our business, making strategic acquisitions, and strengthening our balance sheet. Free cash flow has limitations as an analytical tool, and it should not be considered in isolation or as a substitute for analysis of other GAAP financial measures, such as net cash provided by operating activities. Some of the limitations of free cash flow are that this metric does not reflect our future contractual commitments and may be calculated differently by other companies in our industry, limiting its usefulness as a comparative measure. We expect our free cash flow to fluctuate in future periods as we invest in our business to support our plans for growth.

The following table summarizes our cash flows for the periods presented and provides a reconciliation of net cash from operating activities, the most directly comparable financial measure calculated in accordance with GAAP, to free cash flow, a non-GAAP financial measure, for each of the periods presented:

	Six Months Ended June 30,	
	2023	2022
	(in thousands)	
Net cash provided by operating activities	$ 15,581	$ 8,983
Less: purchases of property and equipment	(773)	(2,131)
Free cash flow	$ 14,808	$ 6,852
Net cash used in investing activities	$ (22,174)	$ (27,720)
Net cash provided by financing activities	$ 7,683	$ 5,631

Components of Results of Operations

Revenue

Our revenues are comprised of revenue from self-managed subscriptions and SaaS subscriptions. Subscriptions to our self-managed software include license, support, and upgrades and updates on a when-and-if-available basis. Our SaaS subscriptions provide access to our latest managed version of our product hosted in a public cloud.

Subscription—Self-Managed and SaaS

Subscription—self-managed and SaaS revenue is generated from the sale of subscriptions for our self-managed software products and revenue from our SaaS subscriptions. For subscriptions to our self-managed software products, revenue is recognized ratably over the subscription term. For our SaaS subscriptions, revenue is recognized based on usage as the usage occurs over the contract period.

License—Self-Managed

The license component of our self-managed subscriptions reflects the revenue recognized by providing customers with access to proprietary software features. License revenue is recognized upfront when the software license is made available to our customer.

Cost of Revenue

Subscription—Self-Managed and SaaS

Cost of subscription—self-managed and SaaS revenue primarily consists of expenses related to providing support to our customers and cloud-related costs, such as hosting and managing costs. These costs primarily consist of personnel-related expenses of our services and customer support personnel, share-based compensation expenses, amortization of acquired intangible assets, public cloud infrastructure costs, depreciation of property and equipment, and allocated overhead. We expect our cost of subscription and SaaS revenue to increase in absolute dollars as our subscription and SaaS revenue increases.

License—Self-Managed

Cost of license self-managed revenue consists of amortization of acquired intangible assets.

Operating Expenses

Research and Development

Research and development costs primarily consist of personnel-related expenses, share-based compensation expenses, associated with our engineering personnel responsible for the design, development, and testing of our products, cost of development environments and tools, and allocated overhead. We expect that our research and development expenses will continue to increase as we increase our research and development headcount to further strengthen and enhance our products and invest in the development of our software.

Sales and Marketing

Sales and marketing expenses primarily consist of personnel-related expenses, share-based compensation expenses, sales commissions primarily associated with our sales and marketing organizations, public cloud infrastructure costs associated with our free trials, freemium offerings, and open source software options, and costs associated with marketing programs and user events. Marketing programs include advertising, promotional events, and brand-building activities. We plan to increase our investment in sales and marketing over the foreseeable future, as we continue to hire additional personnel and invest in sales and marketing programs.

General and Administrative

General and administrative expenses primarily consist of personnel-related expenses, share-based compensation expenses, associated primarily with our finance, legal, human resources and other operational and administrative functions, professional fees for external legal, accounting and other consulting services, directors and officer’s insurance expenses, and allocated overhead. We expect to increase the size of our general and administrative function to support the growth of our business.

Interest and Other Income, Net

Interest and other income, net primarily consists of income earned on our cash equivalents and short-term investments. Interest and other income, net also includes foreign exchange gains and losses.

Income Tax Expense

Income tax expense consists primarily of income taxes related to the U.S. and other foreign jurisdictions in which we conduct business. We maintain a full valuation allowance on certain deferred tax assets in Israel as we have concluded that it is not more likely than not that the deferred tax assets will be realized. Our effective tax rate is affected by tax rates in foreign jurisdictions and the relative amounts of income we earn in those jurisdictions, as well as non-deductible expenses, such as share-based compensation, and changes in our valuation allowance.

Results of Operations

The following tables set forth selected condensed consolidated statements of operations data and such data as a percentage of total revenue for each of the periods indicated:

	Three Months Ended June 30, 2023	Three Months Ended June 30, 2022	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022
	(in thousands)			
Revenue:				
Subscription—self-managed and SaaS	$ 79,467	$ 63,679	$ 154,010	$ 122,748
License—self-managed	4,703	4,128	9,980	8,755
Total subscription revenue	84,170	67,807	163,990	131,503
Cost of revenue:				
Subscription—self-managed and SaaS[(1)(2)(3)]	18,231	15,024	36,434	28,667
License—self-managed[(2)]	218	220	436	440
Total cost of revenue—subscription	18,449	15,244	36,870	29,107
Gross profit	65,721	52,563	127,120	102,396
Operating expenses:				
Research and development[(1)(3)]	33,544	28,945	68,430	56,046
Sales and marketing[(1)(2)(3)]	36,352	31,991	71,838	61,171
General and administrative[(1)(3)(4)]	14,732	14,037	28,972	26,728
Total operating expenses	84,628	74,973	169,240	143,945
Operating loss	(18,907)	(22,410)	(42,120)	(41,549)
Interest and other income, net	4,896	517	8,888	790
Loss before income taxes	(14,011)	(21,893)	(33,232)	(40,759)
Income tax expense	1,456	1,880	3,044	2,718
Net loss	$ (15,467)	$ (23,773)	$ (36,276)	$ (43,477)

(1) Includes share-based compensation expense as follows:

	Three Months Ended June 30, 2023	Three Months Ended June 30, 2022	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022
	(in thousands)			
Cost of revenue: subscription–self-managed and SaaS	$ 2,019	$ 1,613	$ 4,215	$ 2,919
Research and development	7,798	5,330	14,970	10,462
Sales and marketing	6,740	4,792	13,213	9,547
General and administrative	4,765	3,342	8,836	6,223
Total share-based compensation expense	$ 21,322	$ 15,077	$ 41,234	$ 29,151

(2) Includes amortization expense of acquired intangible assets as follows:

	Three Months Ended June 30, 2023	Three Months Ended June 30, 2022	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022
	(in thousands)			
Cost of revenue: subscription–self-managed and SaaS	$ 2,387	$ 2,386	$ 4,774	$ 4,772
Cost of revenue: license—self-managed	218	220	436	440
Sales and marketing	358	236	716	472
Total amortization expense of acquired intangible assets	$ 2,963	$ 2,842	$ 5,926	$ 5,684

(3) Includes acquisition-related costs as follows:

	Three Months Ended June 30, 2023	Three Months Ended June 30, 2022	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022
	(in thousands)			
Cost of revenue: subscription–self-managed and SaaS	$ 5	$ 6	$ 10	$ 13
Research and development	2,745	2,149	5,680	4,524
Sales and marketing	—	112	70	236
General and administrative	64	68	140	234
Total acquisition-related costs	$ 2,814	$ 2,335	$ 5,900	$ 5,007

(4) Includes legal settlement costs as follows:

	Three Months Ended June 30, 2023	Three Months Ended June 30, 2022	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022
	(in thousands)			
General and administrative	$ —	$ 122	$ —	$ 216

	Three Months Ended June 30, 2023	Three Months Ended June 30, 2022	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022
Revenue:				
Subscription—self-managed and SaaS	94 %	94 %	94 %	93 %
License—self-managed	6	6	6	7
Total subscription revenue	100	100	100	100
Cost of revenue:				
Subscription—self-managed and SaaS	22	22	22	22
License—self-managed	—	—	—	—
Total cost of revenue—subscription	22	22	22	22
Gross profit	78	78	78	78
Operating expenses:				
Research and development	40	43	42	43
Sales and marketing	43	47	44	47
General and administrative	17	21	18	20
Total operating expenses	100	111	104	110
Operating loss	(22)	(33)	(26)	(32)
Interest and other income, net	5	1	6	1
Loss before income taxes	(17)	(32)	(20)	(31)
Income tax expense	1	3	2	2
Net loss	(18)%	(35)%	(22)%	(33)%

Comparison of the Three Months Ended June 30, 2023 and 2022

Revenue

	Three Months Ended June 30, 2023	Three Months Ended June 30, 2022	$ Change	% Change
	(in thousands, except percentages)			
Subscription—self-managed and SaaS	$ 79,467	$ 63,679	$ 15,788	25 %
License—self-managed	4,703	4,128	575	14 %
Total subscription revenue	$ 84,170	$ 67,807	$ 16,363	24 %

The increase in total subscription revenue for the three months ended June 30, 2023 compared to the three months ended June 30, 2022 consisted of approximately a $12.6 million growth from existing customers and the remaining attributable to new customers.

Cost of Revenue and Gross Margin

	Three Months Ended June 30, 2023	2022	$ Change	% Change
	(in thousands, except percentages)			
Subscription—self-managed and SaaS	$ 18,231	$ 15,024	$ 3,207	21 %
License—self-managed	218	220	(2)	(1)%
Total cost of revenue—subscription	$ 18,449	$ 15,244	$ 3,205	21 %
Gross margin	78 %	78 %		

Total cost of revenue increased for the three months ended June 30, 2023 compared to the three months ended June 30, 2022. The increase was primarily attributable to an increase of $2.3 million in third-party hosting costs mainly driven by increased revenue from SaaS subscriptions and an increase of $0.4 million in share-based compensation expense as discussed in the section titled “*Share-Based Compensation Expense*” below.

Gross margin remained consistent for the three months ended June 30, 2023 compared to the three months ended June 30, 2022.

Operating Expenses

Research and Development

	Three Months Ended June 30, 2023	2022	$ Change	% Change
	(in thousands, except percentages)			
Research and development	$ 33,544	$ 28,945	$ 4,599	16 %

Research and development expense increased for the three months ended June 30, 2023 compared to the three months ended June 30, 2022. The increase was primarily attributable to an increase of $2.5 million in share-based compensation expense as discussed in the section titled “*Share-Based Compensation Expense*” below and an increase of $0.9 million in personnel-related expenses mainly as a result of increased headcount.

Sales and Marketing

	Three Months Ended June 30, 2023	2022	$ Change	% Change
	(in thousands, except percentages)			
Sales and marketing	$ 36,352	$ 31,991	$ 4,361	14 %

Sales and marketing expense increased for the three months ended June 30, 2023 compared to the three months ended June 30, 2022. The increase was primarily attributable to an increase of $1.9 million in share-based compensation expense as discussed in the section titled “*Share-Based Compensation Expense*” below, an increase of $1.5 million in personnel-related expenses mainly as a result of increased headcount, and an increase of $1.1 million in commissions mainly from amortization of deferred contract acquisition costs.

General and Administrative

	Three Months Ended June 30, 2023	2022	$ Change	% Change
	(in thousands, except percentages)			
General and administrative	$ 14,732	$ 14,037	$ 695	5 %

General and administrative expense increased for the three months ended June 30, 2023 compared to the three months ended June 30, 2022. The increase was primarily attributable to an increase of $1.4 million in share-based compensation expense as discussed in the section titled “*Share-Based Compensation Expense*” below, partially offset by a decrease of $0.6 million in professional fees for legal, recruiting, and other consulting services.

Share-based Compensation Expense

	Three Months Ended June 30, 2023	2022	$ Change	% Change
	(in thousands, except percentages)			
Cost of revenue: subscription–self-managed and SaaS	$ 2,019	$ 1,613	$ 406	25 %
Research and development	7,798	5,330	2,468	46 %
Sales and marketing	6,740	4,792	1,948	41 %
General and administrative	4,765	3,342	1,423	43 %
Total share-based compensation expense	$ 21,322	$ 15,077	$ 6,245	41 %

Share-based compensation expenses increased for the three months ended June 30, 2023 compared to the three months ended June 30, 2022, primarily attributable to grants to new and existing employees.

Interest and Other Income, Net

	Three Months Ended June 30, 2023	2022	$ Change	% Change
	(in thousands, except percentages)			
Interest and other income, net	$ 4,896	$ 517	$ 4,379	847 %

Interest and other income, net increased for the three months ended June 30, 2023 compared to the three months ended June 30, 2022, primarily due to higher interest income on deposits and marketable securities as a result of higher interest rates.

Income Tax Expense

	Three Months Ended June 30, 2023	2022	$ Change	% Change
	(in thousands, except percentages)			
Income tax expense	$ 1,456	$ 1,880	$ (424)	(23)%
Effective income tax rate	(10)%	(9)%		

Our effective tax rate is affected primarily by tax rates in foreign jurisdictions and the relative amounts of income we earn in those jurisdictions, as well as non-deductible expenses, tax benefits arising from deductions for share-based compensation, and changes in our valuation allowance.

Comparison of the Six Months Ended June 30, 2023 and 2022

Revenue

	Six Months Ended June 30, 2023	2022	$ Change	% Change
	(in thousands, except percentages)			
Subscription—self-managed and SaaS	$ 154,010	$ 122,748	$ 31,262	25 %
License—self-managed	9,980	8,755	1,225	14 %
Total subscription revenue	$ 163,990	$ 131,503	$ 32,487	25 %

The increase in total subscription revenue for the six months ended June 30, 2023 compared to the six months ended June 30, 2022 consisted of approximately a $25.9 million growth from existing customers and the remaining attributable to new customers.

Cost of Revenue and Gross Margin

	Six Months Ended June 30, 2023	2022	$ Change	% Change
	(in thousands, except percentages)			
Subscription—self-managed and SaaS	$ 36,434	$ 28,667	$ 7,767	27 %
License—self-managed	436	440	(4)	(1)%
Total cost of revenue—subscription	$ 36,870	$ 29,107	$ 7,763	27 %
Gross margin	78 %	78 %		

Total cost of revenue increased for the six months ended June 30, 2023 compared to the six months ended June 30, 2022. The increase was primarily attributable to an increase of $4.3 million in third-party hosting costs mainly driven by increased revenue from SaaS subscriptions, an increase of $1.3 million in personnel-related expenses mainly as a result of increased headcount, and an increase of $1.3 million in share-based compensation expense as discussed in the section titled "*Share-Based Compensation Expense*" below.

Gross margin remained consistent for the six months ended June 30, 2023 compared to the six months ended June 30, 2022.

Operating Expenses

Research and Development

	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022	$ Change	% Change
	(in thousands, except percentages)			
Research and development	$ 68,430	$ 56,046	$ 12,384	22 %

Research and development expense increased for the six months ended June 30, 2023 compared to the six months ended June 30, 2022. The increase was primarily attributable to an increase of $4.5 million in share-based compensation expense as discussed in the section titled "*Share-Based Compensation Expense*" below, an increase of $4.4 million in personnel-related expenses mainly as a result of increased headcount, and an increase of $1.5 million in costs of development environments and tools.

Sales and Marketing

	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022	$ Change	% Change
	(in thousands, except percentages)			
Sales and marketing	$ 71,838	$ 61,171	$ 10,667	17 %

Sales and marketing expense increased for the six months ended June 30, 2023 compared to the six months ended June 30, 2022. The increase was primarily attributable to an increase of $4.0 million in personnel-related expenses mainly as a result of increased headcount, an increase of $3.7 million in share-based compensation expense as discussed in the section titled "*Share-Based Compensation Expense*" below, and an increase of $2.0 million in commissions mainly from amortization of deferred contract acquisition costs.

General and Administrative

	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022	$ Change	% Change
	(in thousands, except percentages)			
General and administrative	$ 28,972	$ 26,728	$ 2,244	8 %

General and administrative expense increased for the six months ended June 30, 2023 compared to the six months ended June 30, 2022. The increase was primarily attributable to an increase of $2.6 million in share-based compensation expense as discussed in the section titled "*Share-Based Compensation Expense*" below and an increase of $1.5 million in personnel-related expenses mainly as a result of increased headcount, partially offset by a decrease of $1.4 million in professional fees for legal, recruiting, and other consulting services.

Share-based Compensation Expense

	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022	$ Change	% Change
	(in thousands, except percentages)			
Cost of revenue: subscription–self-managed and SaaS	$ 4,215	$ 2,919	$ 1,296	44 %
Research and development	14,970	10,462	4,508	43
Sales and marketing	13,213	9,547	3,666	38
General and administrative	8,836	6,223	2,613	42
Total share-based compensation expense	$ 41,234	$ 29,151	$ 12,083	41 %

Share-based compensation expenses increased for the six months ended June 30, 2023 compared to the six months ended June 30, 2022, primarily attributable to grants to new and existing employees.

Interest and Other Income, Net

	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022	$ Change	% Change
	(in thousands, except percentages)			
Interest and other income, net	$ 8,888	$ 790	$ 8,098	1025 %

Interest and other income, net increased for the six months ended June 30, 2023 compared to the six months ended June 30, 2022 primarily due to higher interest income on deposits and marketable securities as a result of higher interest rates.

Income Tax Expense

	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022	$ Change	% Change
	(in thousands, except percentages)			
Income tax expense	$ 3,044	$ 2,718	$ 326	12 %
Effective income tax rate	(9)%	(7)%		

Our effective tax rate is affected primarily by tax rates in foreign jurisdictions and the relative amounts of income we earn in those jurisdictions, as well as non-deductible expenses, tax benefits arising from deductions for share-based compensation, and changes in our valuation allowance.

Liquidity and Capital Resources

Since our inception, we have financed our operations primarily through sales of equity securities and cash generated from operations. Our principal uses of cash in recent periods have been funding our operations, investing in capital expenditures, and business and asset acquisitions.

As of June 30, 2023, our principal sources of liquidity were cash, cash equivalents, and short-term investments of $469.8 million. Cash and cash equivalents primarily consist of cash in banks and money market funds. Short-term investments generally consist of bank deposits, certificates of deposit, commercial paper, corporate debt securities, municipal securities, and government and agency debt. We believe our existing cash, cash equivalents, and short-term investments, together with cash provided by operations, will be sufficient to meet our needs for the next 12 months, as well as in the long-term.

Our future capital requirements will depend on many factors including our revenue growth rate, subscription renewal activity, billing frequency, the timing, and extent of spending to support further sales and marketing and research and development efforts, the continuing market acceptance of our products and services, as well as expenses associated with our international expansion, the timing, and extent of additional capital expenditures to invest in existing and new office spaces. We may in the future enter into arrangements to acquire or invest in complementary businesses, services, and technologies, including intellectual property rights. We may be required to seek additional equity or debt financing. In the event that additional financing is required from outside sources, we may not be able to raise it on terms acceptable to us or at all. If we are unable to raise additional capital when desired, our business, results of operations, and financial condition would be materially and adversely affected.

The following table summarizes our cash flows for the periods presented:

	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022
	(in thousands)	
Net cash provided by operating activities	$ 15,581	$ 8,983
Net cash used in investing activities	$ (22,174)	$ (27,720)
Net cash provided by financing activities	$ 7,683	$ 5,631

Operating Activities

Net cash provided by operating activities of $15.6 million for six months ended June 30, 2023 was related to our net loss of $36.3 million adjusted for non-cash charges of $49.6 million, including share-based compensation expense of $41.2 million and depreciation and amortization expense of $7.7 million, and changes in our operating assets and liabilities of $2.3 million. The changes in our operating assets and liabilities were primarily related to an increase of $8.7 million in deferred revenue driven by higher sales and an increase of $3.0 million in accrued expenses and other liabilities primarily due to higher income tax obligations, partially offset by a decrease of $3.8 million in operating lease liabilities as a result of payments, an increase of $2.0 million in prepaid assets and other assets primarily due to higher accrued interest receivable, a decrease of $1.9 million in accounts payable due to timing of payments, and an increase of $1.6 million in deferred contract acquisition costs related to capitalized commissions.

Net cash provided by operating activities of $9.0 million for the six months ended June 30, 2022 was related to our net loss of $43.5 million adjusted for non-cash charges of $42.2 million, including share-based compensation expense of $29.2 million and depreciation and amortization expense of $7.1 million, and changes in our operating assets and liabilities of $10.2 million. The changes in our operating assets and liabilities were primarily related to an increase of $10.0 million in deferred revenue driven by higher sales and an increase of $5.5 million in accrued expense and other liabilities mostly due to higher income tax liabilities, partially offset by a decrease of $5.4 million in operating lease liabilities as a result of payments and revaluation of lease liabilities denominated in currencies other than our functional currency.

Investing Activities

Net cash used in investing activities of $22.2 million for the six months ended June 30, 2023 consisted primarily of the net purchase of short-term investments of $21.4 million.

Net cash used in investing activities of $27.7 million for the six months ended June 30, 2022 consisted primarily of the net purchase of short-term investments of $25.4 million and capital expenditure of $2.1 million.

Financing Activities

Net cash provided by financing activities of $7.7 million for the six months ended June 30, 2023 consisted primarily of proceeds from employee share purchases under our ESPP of $3.5 million and proceeds from exercise of share options of $3.4 million.

Net cash provided by financing activities of $5.6 million for the six months ended June 30, 2022 consisted of proceeds from employee share purchases under our ESPP of $3.3 million and proceeds from exercise of share options of $2.9 million, partially offset by net payments of $0.5 million to tax authorities associated with our employee equity transactions.

Contractual Obligations

The following table summarizes our non-cancellable contractual obligations as of June 30, 2023:

		Payments Due by Period	
	Total	2023 (Remainder)	2024 and Thereafter
		(in thousands)	
Operating lease obligations	$ 28,050	$ 4,438	$ 23,612
Purchase obligations	44,276	1,786	42,490
Total	$ 72,326	$ 6,224	$ 66,102

The contractual commitment amounts in the table above are associated with agreements that are enforceable and legally binding. Obligations under contracts that we can cancel without a significant penalty are not included in the table above.

Critical Accounting Policies and Estimates

Our condensed consolidated financial statements are prepared in accordance with GAAP. The preparation of these condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses, as well as related disclosures. We evaluate our estimates and assumptions on an ongoing basis. Our estimates are based on historical experience and various other assumptions that we believe to be reasonable under the circumstances. As events continue to evolve and additional information becomes available, our estimates and assumptions may change materially in future periods.

Our critical accounting policies and estimates were disclosed in Item 7, Management’s Discussion and Analysis of Financial Condition and Results of Operations included in our Annual Report. There have been no significant changes to these policies and estimates during the six months ended June 30, 2023.

ITEM 3. QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT MARKET RISK

We have operations in the United States and internationally, and we are exposed to market risk in the ordinary course of our business.

Foreign Currency Exchange Risk

Our revenue and expenses are primarily denominated in U.S. dollars. Our functional currency is the U.S. dollar. Substantially all of our sales are denominated in U.S. dollars, and therefore our revenue is not subject to significant foreign currency risk. However, a significant portion of our operating costs in Israel, consisting principally of salaries and related personnel expenses, and operating lease and facility expenses are denominated in NIS. This foreign currency exposure gives rise to market risk associated with exchange rate movements of the U.S. dollar against the NIS. Furthermore, we anticipate that a material portion of our expenses will continue to be denominated in NIS.

To reduce the impact of foreign exchange risks associated with forecasted future cash flows and certain existing assets and liabilities and the volatility in our Condensed Consolidated Statements of Operations, we have established a hedging program. Foreign currency contracts are generally utilized in this hedging program. Our foreign currency contracts are generally short-term in duration. We do not enter into derivative instruments for trading or speculative purposes. We account for our derivative instruments as either assets or liabilities and carry them at fair value in the Condensed Consolidated Balance Sheets. The accounting for changes in the fair value of the derivative depends on the intended use of the derivative and the resulting designation. Our hedging program reduces but does not eliminate the impact of currency exchange rate movements. The effect of a hypothetical 10% change in foreign currency exchange rates applicable to our business, after considering our hedging programs, would not have had a material impact on our results of operations for the three and six months ended June 30, 2023.

Our derivatives expose us to credit risk to the extent that the counterparties may be unable to meet the terms of the agreement. We seek to mitigate such risk by limiting our counterparties to major financial institutions and by spreading the risk across a number of major financial institutions. However, failure of one or more of these financial institutions is possible and could result in incurred losses.

As of June 30, 2023, our cash, cash equivalents, restricted cash, and short-term investments were primarily denominated in U.S. dollars. A 10% increase or decrease in current exchange rates would not materially affect our cash, cash equivalents, restricted cash, and short-term investment balances as of June 30, 2023.

Interest Rate Risk

As of June 30, 2023, we had cash and cash equivalents of $46.7 million, and short-term investments of $423.1 million. Cash and cash equivalents primarily consist of cash in banks and money market funds. Short-term investments generally consist of bank deposits, certificates of deposit, commercial paper, corporate debt securities, municipal securities, and government and agency debt. Our cash, cash equivalents, and short-term investments are held for working capital purposes. The primary objectives of our investment activities are the preservation of capital, the fulfillment of liquidity needs and the fiduciary control of cash. We do not enter into investments for trading or speculative purposes. Such interest-earning instruments carry a degree of interest rate risk. Changes in interest rates affect the interest earned on our cash and cash equivalents and marketable securities, and the market value of those securities. A hypothetical 1% increase in interest rates would not have had a material impact on their fair value as of June 30, 2023.

Inflation Risk

We do not believe that inflation has had a material effect on our business, financial condition, or results of operations, other than its impact on the general economy. However, if our costs, in particular labor, sales and marketing, and hosting costs, were to become subject to inflationary pressures, we might not be able to fully offset such higher costs through price increases. Our inability or failure to do so could harm our business, financial condition, and results of operations.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our disclosure controls and procedures are designed to ensure that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Our management, with the participation and supervision of our Chief Executive Officer and our Chief Financial Officer, have evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that as of such date, our disclosure controls and procedures were, in design and operation, effective at a reasonable assurance level.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the period covered by this Quarterly Report on Form 10-Q that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on the Effectiveness of Controls

The effectiveness of any system of internal control over financial reporting, including ours, is subject to inherent limitations, including the exercise of judgment in designing, implementing, operating, and evaluating the controls and procedures, and the inability to eliminate misconduct completely. Accordingly, in designing and evaluating the disclosure controls and procedures, management recognizes that any system of internal control over financial reporting, including ours, no matter how well designed and operated, can only provide reasonable, not absolute, assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply their judgment in evaluating the benefits of possible controls and procedures relative to their costs. Moreover, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

PART II - OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

The information set forth under the heading “Legal Proceedings” in Note 10 to the condensed consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q is incorporated herein by reference.

ITEM 1A. RISK FACTORS

A description of the risks associated with our business, financial condition, and results of operations is set forth in Part I, Item 1A, of our Annual Report. There have been no material changes from the risk factors previously disclosed in our Annual Report, except for the following risk factors. The risk factors below should be read in conjunction with the risk factors and other information disclosed in our Annual Report.

Risks Related to Our Business and Industry

Unfavorable economic conditions may adversely affect our business and financial condition due to impacts on consumer and business spending, including reductions in information technology spending and decreased demand for our products, which could limit our ability to grow our business.

Our operations and financial performance depend in part on global economic conditions and the impact of these conditions on levels of information technology spending and the willingness of our current and prospective customers to purchase our products. Adverse macroeconomic conditions, including recent inflation, slower growth or recession, bank failures or instability in the financial services sector, tighter credit, higher interest rates, and currency fluctuations, could adversely impact consumer and businesses confidence and spending and negatively affect demand for our products.

For example, we are currently operating in a period of economic uncertainty and the United States has recently experienced historically high levels of inflation and rising interest rates, which has led to increased costs of labor, capital, employee compensation and other similar effects. If unfavorable conditions in the national and global economy persist, or worsen, our current and potential customers’ operating costs will likely increase, which could result in reduced operating and information technology budgets. To the extent our products are perceived by customers and potential customers as discretionary, our revenue may be disproportionately affected by delays or reductions in general information technology spending. Such delays or reductions in technology spending are often associated with enhanced budget scrutiny by our customers including additional levels of approvals, cloud optimization efforts and additional time to evaluate and test our products, which can lead to long and unpredictable sales cycles. We have recently experienced longer sales cycles for certain products and enhanced budget scrutiny by our customers, and expect to continue to experience these challenges given the current macroeconomic environment. Also, customers may choose to develop in-house software as an alternative to using our products, and competitors may respond to such negative conditions in the general economy by lowering prices, any of which could adversely affect demand for our products and limit our ability to grow our business.

The present conditions and state of the U.S. and global economies make it difficult to predict whether, when and to what extent a recession has occurred or will occur in the near future. We cannot predict the timing, strength or duration of any economic slowdown, instability or recovery, generally or within any particular industry. If the economic conditions of the general economy or markets in which we operate do not improve, or worsen from present levels, our business, results of operations, and financial condition could be adversely affected.

Risks Related to Our Incorporation and Location in Israel

Conditions in Israel could materially and adversely affect our business.

Many of our employees, including certain management members operate from our offices that are located in Netanya and Tel Aviv, Israel. In addition, a number of our officers and directors are residents of Israel. Accordingly, political, economic, and military conditions in Israel and the surrounding region may directly affect our business and operations. In recent years, Israel has been engaged in sporadic armed conflicts with Hamas, an Islamist terrorist group that controls the Gaza Strip, with Hezbollah, an Islamist terrorist group that controls large portions of southern Lebanon, and with Iranian-backed military forces in Syria. In addition, Iran has threatened to attack Israel and may be developing nuclear weapons. Some of these hostilities were accompanied by missiles being fired from the Gaza Strip against civilian targets in various parts of Israel, including areas in which our employees and some of our consultants are located, and negatively affected business conditions in Israel. Any hostilities involving Israel or the interruption or curtailment of trade between Israel and its trading partners could adversely affect our operations and results of operations.

Our commercial insurance does not cover losses that may occur as a result of events associated with war and terrorism. Although the Israeli government currently covers the reinstatement value of direct damages that are caused by terrorist attacks or acts of war, we cannot assure you that this government coverage will be maintained or that it will sufficiently cover our potential damages. Any losses or damages incurred by us could have a material adverse effect on our business. Any armed conflicts or political instability in the region would likely negatively affect business conditions and could harm our results of operations.

Further, in the past, the State of Israel and Israeli companies have been subjected to economic boycotts. Several countries still restrict business with the State of Israel and with Israeli companies. These restrictive laws and policies may have an adverse impact on our results of operations, financial condition or the expansion of our business. A campaign of boycotts, divestment, and sanctions has been undertaken against Israel, which could also adversely affect our business. Actual or perceived political instability in Israel or any negative changes in the political environment, may individually or in the aggregate adversely affect the Israeli economy and, in turn, the Group’s business, financial condition, results of operations, and prospects.

In addition, many Israeli citizens are obligated to perform several weeks of annual military reserve duty each year until they reach the age of 40 (or older, for reservists who are military officers or who have certain occupations) and, in the event of a military conflict, may be called to active duty. In response to increases in terrorist activity, there have been periods of significant call-ups of military reservists. It is possible that there will be military reserve duty call-ups in the future. Our operations could be disrupted by such call-ups, which may include the call-up of members of our management. Such disruption could materially adversely affect our business, prospects, financial condition, and results of operations.

Since early 2023, the Israeli government has been pursuing changes to Israel’s judicial system. On July 24, 2023, the government passed into law what is commonly referred to as the “reasonableness” bill, limiting, among others, the Israeli Supreme Court's power to exercise judicial review on the reasonableness of government decisions and actions. This change marked the initial step of a planned judicial overhaul that led to domestic social and political tensions during the second quarter of 2023. In response to the foregoing developments, individuals, organizations and institutions, both within and outside of Israel, have voiced concerns that the proposed changes may negatively impact the business environment in Israel including due to reluctance of foreign investors to invest or transact business in Israel as well as to increased currency fluctuations, downgrades in credit rating, increased interest rates, increased volatility in security markets, and other changes in macroeconomic conditions. To the extent that any of these negative developments occur, they may have an adverse effect on our business, our results of operations and our ability to raise additional funds, if deemed necessary by our management and board of directors.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

Securities Trading Plans of Directors and Executive Officers

During the three months ended June 30, 2023, the following directors, as defined in Rule 16a-1(f) of the Exchange Act, adopted a “Rule 10b5-1 trading arrangement” as defined in Item 408 of Regulation S-K, as follows:

On May 12, 2023, Mr. Frederic Simon, our Chief Data Scientist and member of our board of directors, adopted a Rule 10b5-1 trading arrangement providing for the sale from time to time of an aggregate of up to 870,000 ordinary shares. The trading arrangement is intended to satisfy the affirmative defense in Rule 10b5-1(c). The duration of the trading arrangement is until August 23, 2024, or earlier if all transactions under the trading arrangement are completed.

On May 9, 2023, Ms. Elisa Steele, a member of our board of directors, adopted a Rule 10b5-1 trading arrangement providing for the sale, from time to time of an aggregate of up to 3,598 ordinary shares. The trading arrangement is intended to satisfy the affirmative defense in Rule 10b5-1(c). The duration of the trading arrangement is until May 9, 2024, or earlier if all transactions under the trading arrangement are completed.

No other officers or directors, as defined in Rule 16a-1(f), adopted or terminated a “Rule 10b5-1 trading arrangement” or a “non-Rule 10b5-1 trading arrangement,” each as defined in Item 408 of Regulation S-K, during the three months ended June 30, 2023.

ITEM 6. EXHIBITS

The documents listed below are incorporated by reference or are filed with this Quarterly Report on Form 10-Q, in each case as indicated therein (numbered in accordance with Item 601 of Regulation S-K).

EXHIBIT INDEX

Exhibit Number	Description	Form	File No.	Exhibit	Filing Date
31.1	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
31.2	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
32.1*	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002.				
32.2*	Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002.				
101 INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.				
101 SCH	Inline XBRL Taxonomy Extension Schema Document.				
101 CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.				
101 DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.				
101 LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.				
101 PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.				
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).				

* The certifications furnished in Exhibits 32.1 and 32.2 hereto are deemed to accompany this Quarterly Report on Form 10-Q and will not be deemed "filed" for purposes of Section 18 or the Securities Exchange Act of 1934, as amended, except to the extent that the registrant specifically incorporates it by reference.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date:	August 3, 2023	By:		/s/ Shlomi Ben Haim
			Name:	Shlomi Ben Haim
			Title:	Chief Executive Officer
				(*Principal Executive Officer*)
Date:	August 3, 2023	By:		/s/ Jacob Shulman
			Name:	Jacob Shulman
			Title:	Chief Financial Officer
				(*Principal Financial Officer & Principal Accounting Officer*)

Exhibit 31.1

**CERTIFICATION PURSUANT TO RULE 13a-14(a) OR 15d-14a OF
THE SECURITIES EXCHANGE ACT OF 1934
AS ADOPTED PURSUANT TO SECTION 302
OF THE SARBANES OXLEY ACT OF 2002**

I, Shlomi Ben Haim, certify that:

1.I have reviewed this Quarterly Report on Form 10-Q of JFrog Ltd.;

2.Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3.Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4.The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f) for the registrant and have:

a.Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b.Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c.Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d.Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5.The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a.All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b.Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

	JFROG LTD.
Date: August 3, 2023	/s/ Shlomi Ben Haim
	Shlomi Ben Haim
	Chief Executive Officer
	(Principal Executive Officer)

Exhibit 31.2

**CERTIFICATION PURSUANT TO RULE 13a-14(a) OR 15d-14a OF
THE SECURITIES EXCHANGE ACT OF 1934
AS ADOPTED PURSUANT TO SECTION 302
OF THE SARBANES OXLEY ACT OF 2002**

I, Jacob Shulman, certify that:

1.I have reviewed this Quarterly Report on Form 10-Q of JFrog Ltd.;

2.Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3.Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4.The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f) for the registrant and have:

a.Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b.Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c.Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d.Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5.The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a.All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b.Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

JFROG LTD.

Date: August 3, 2023

/s/ Jacob Shulman
Jacob Shulman
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

I, Shlomi Ben Haim, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report on Form 10-Q of JFrog Ltd. for the fiscal quarter ended June 30, 2023 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in such Quarterly Report on Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of JFrog Ltd.

	JFROG LTD.
Date: August 3, 2023	/s/ Shlomi Ben Haim
	Shlomi Ben Haim Chief Executive Officer *(Principal Executive Officer)*

Exhibit 32.2

**CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

I, Jacob Shulman, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report on Form 10-Q of JFrog Ltd. for the fiscal quarter ended June 30, 2023 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in such Quarterly Report on Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of JFrog Ltd.

	JFROG LTD.
Date: August 3, 2023	/s/ Jacob Shulman
	Jacob Shulman
	Chief Financial Officer
	(Principal Financial Officer)