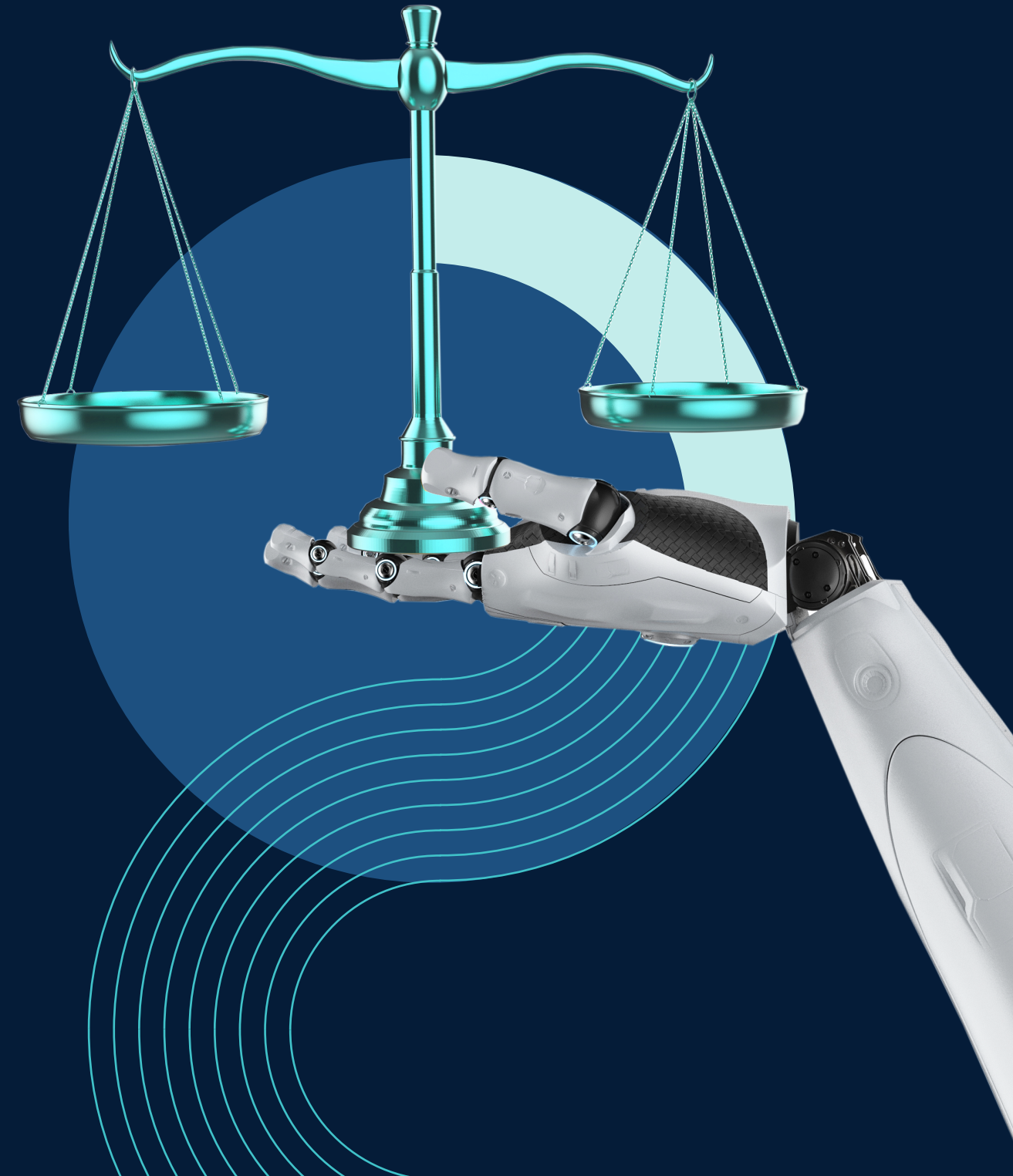# PitchBook

EMERGING TECH RESEARCH

Artificial Intelligence & Machine Learning Report

VC trends and emerging opportunities

Q2 2023

REPORT PREVIEW
The full report is available through the PitchBook Platform.

Contents

We are adding PitchBook Exit Predictor probabilities to our Emerging Technology Research reports. PitchBook's proprietary VC Exit Predictor estimates the probability that a startup, or VC-backed company, will successfully IPO, be acquired, or merge. The tool is available exclusively to PitchBook subscribers.

Institutional Research Group

Analysis

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Data
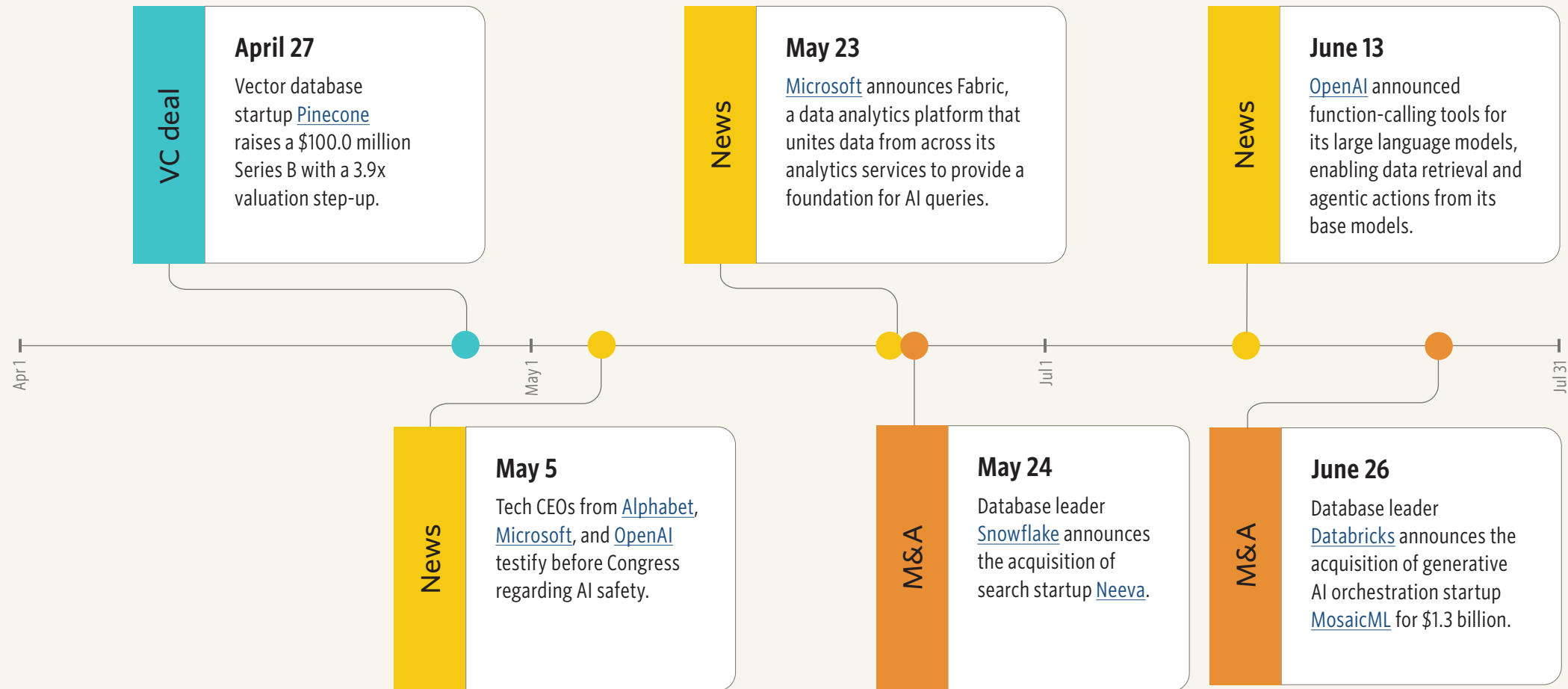
Matthew Nacionales Data Analyst

Q2 2023 timeline

VC deal

April 27

Vector database startup Pinecone raises a $100.0 million Series B with a 3.9x valuation step-up.

News

May 23

Microsoft announces Fabric, a data analytics platform that unites data from across its analytics services to provide a foundation for AI queries.

News

June 13

OpenAI announced function-calling tools for its large language models, enabling data retrieval and agentic actions from its base models.

News

May 5

Tech CEOs from Alphabet, Microsoft, and OpenAI testify before Congress regarding AI safety.

M&A

May 24

Database leader Snowflake announces the acquisition of search startup Neeva.

M&A

June 26

Database leader Databricks announces the acquisition of generative AI orchestration startup MosaicML for $1.3 billion.

Apr 1   May 1   Jul 1   Jul 31

Q2 VC activity

1,365
total deals

$19.4B
total VC raised

-5.5%
deal value growth QoQ

2023 YTD summary

2,809
total deals

$39.5B
total VC raised
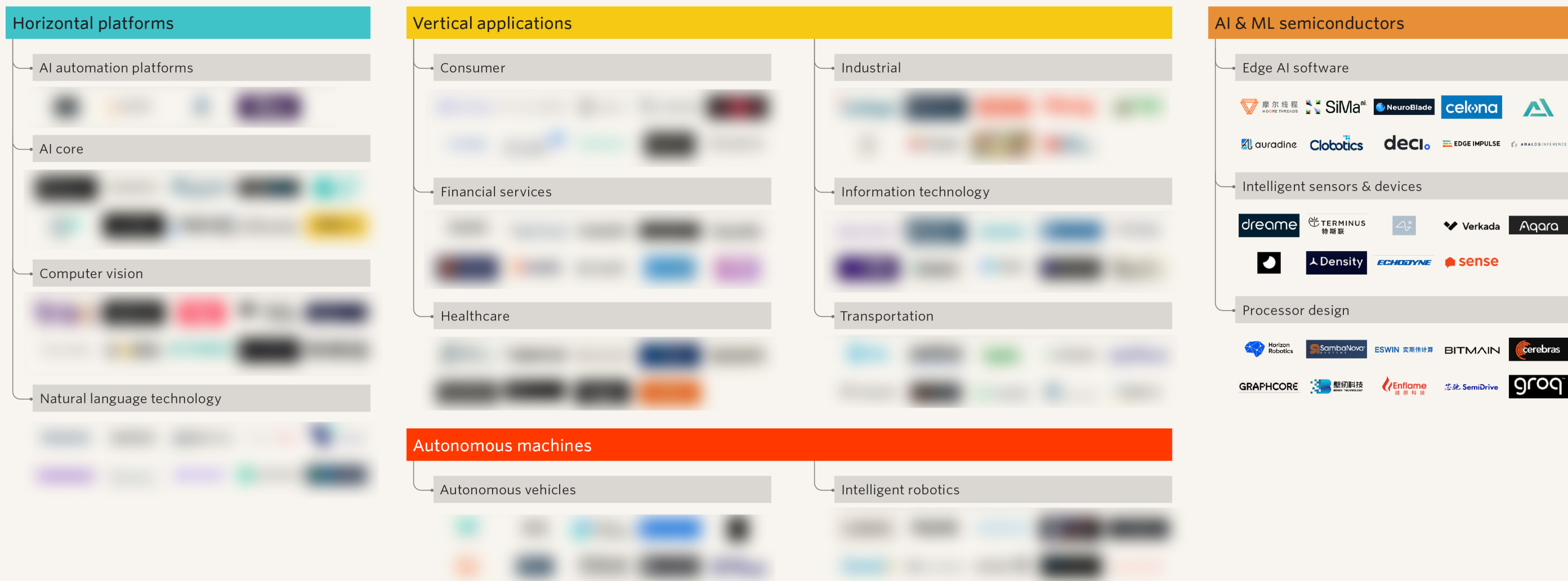
-30.3%
deal value growth YoY

AI & ML landscape

1. Horizontal platforms
2. Vertical applications
3. Semiconductors
4. Autonomous machines

AI & ML VC ecosystem market map

Market map is a representative overview of venture-backed or growth-stage providers in each segment. Companies listed have received venture capital or other notable private investments.

Horizontal platforms

AI automation platforms

AI core

Computer vision

Natural language technology

Vertical applications

Consumer

Financial services

Healthcare

Industrial

Information technology

Transportation

AI & ML semiconductors

Edge AI software

摩尔线程 MOORE THREADS · SiMa.ai · NeuroBlade · celona · A

auradine · Clobotics · deci. · EDGE IMPULSE · ANALOG INFERENCE

Intelligent sensors & devices

dreame · TERMINUS 特斯联 · 4. · Verkada · Aqara

· Density · ECHODYNE · sense

Processor design

Horizon Robotics · SambaNova SYSTEMS · ESWIN 奕斯伟计算 · BITMAIN · cerebras

GRAPHCORE · 壁仞科技 BIRENTECH · Enflame 燧原科技 · 芯驰 SemiDrive · groq

Autonomous machines

Autonomous vehicles

Intelligent robotics

VC activity

VC deal activity rebounded in Q2 with $19.4 billion invested after Q1's low deal value (apart from an outlier deal from OpenAI). We began tracking Stripe as an AI company based on its integration of GPT-4 and internal usage of AI, which drove deal value higher with a $6.9 billion venture-growth investment. Beyond Stripe's outlier deal, OpenAI's momentum benefited foundation model startups, spurring megadeals for Inflection, Anthropic, Cohere, Runway, and Mistral AI. Inflection closed the largest early-stage deal we have tracked for an AI horizontal platform company, raising $1.3 billion primarily to build a computing cluster for personalized AI foundation models. Vertical application funding remained tepid, with healthcare funding continuing to decline and IT applications barely crossing $1.0 billion in funding. Hardware funding has continued to set lows since the start of the COVID-19 pandemic across autonomous vehicles, semiconductors, and robotics, with a notable exception in photonic computing startup Lightmatter's $153.3 million Series C. Participation of strategic investors in foundation model deals can drive VC deal values going forward.

VC exit value continues to scrape the bottom of the barrel, yet Q2 offered positive signs of a generative AI acquisition trend. Database leaders Snowflake and Databricks announced major acquisitions. We believe Snowflake paid around $150.0 million for Neeva, though an exact deal value was not disclosed. Databricks pre-empted a VC round for MosaicML with a $1.3 billion acquisition offer that integrates cost-effective, open-source foundation models with the company's data management platform. Major IPOs continued at a regular pace in China, with facial recognition camera maker Intellifusion raising $565.6 million in an IPO. Microsoft's recent victory in a federal challenge to its acquisition of video game company Activision Blizzard may embolden further Big Tech M&A.

AI & ML VC deal activity
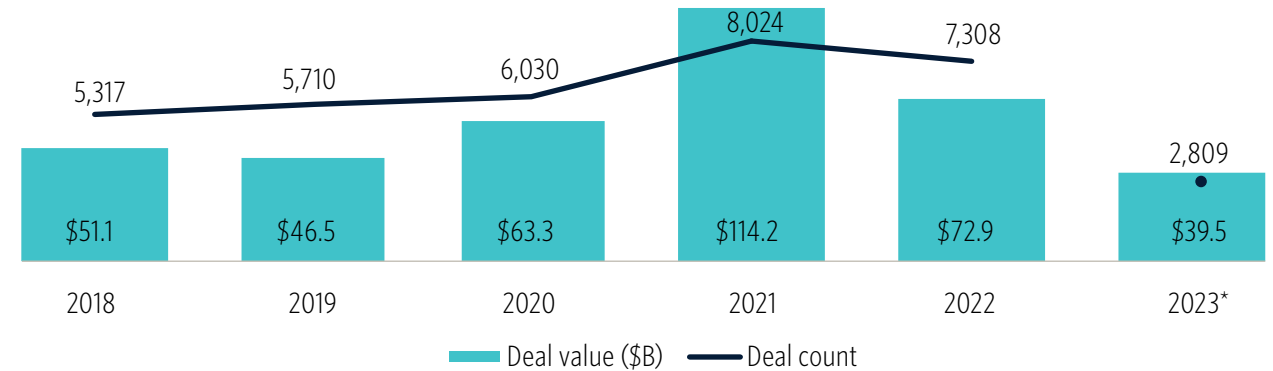
Source: PitchBook • Geography: Global • *As of June 30, 2023

AI & ML VC exit value ($B) by type
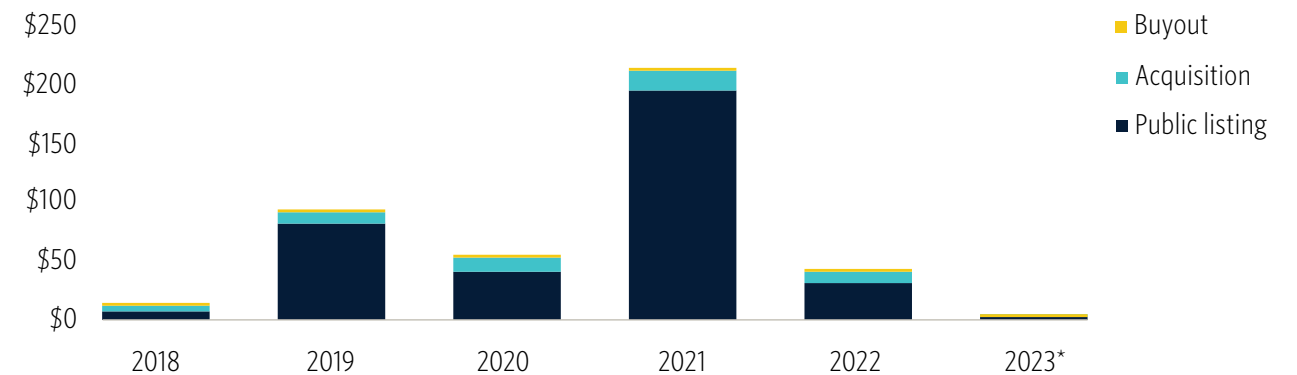
Source: PitchBook • Geography: Global • *As of June 30, 2023

Key AI & ML late-stage VC deals by deal value ($M)*

Company	Close date (2023)	Subsegment	Deal value ($M)	Pre-money valuation ($M)	Lead investor(s)
CoreWeave	April 14	AI automation platforms	$421.0	$2,100.0	Magnetar Capital
Cohere	June 8	Natural language technology	$270.0	$1,750.0	Inovia Capital
Builder	May 23	AI automation platforms	$250.0	N/A	Qatar Investment Authority
Lightmatter	May 31	Chips	$153.3	$566.7	Aliya Capital Partners, SIP Global Partners
Runway	June 29	Consumer AI	$141.0	$1,359.0	Felicis
Altruist	April 12	AI in financial services	$111.6	$850.0	Insight Partners
Pinecone	April 27	AI core	$100.0	$650.0	Andreessen Horowitz
AMP Robotics	May 9	Intelligent robotics	$99.0	N/A	Congruent Ventures, Wellington Management
Replit	April 20	AI in IT	$97.4	$1,062.6	Andreessen Horowitz
Synthesia	June 12	Consumer AI	$90.0	$910.0	Accel

Source: PitchBook • Geography: Global • *As of June 30, 2023

Top VC- and PE-backed AI & ML companies by total VC raised to date*

Company	VC ($M) raised to date	Segment	Category	IPO probability (%)	M&A probability (%)	No exit probability (%)
OpenAI	$11,010.1	AI core	Foundation models	19%	79%	2%
Stripe	$9,105.0	Financial services	Payments	96%	2%	2%
Waymo	$3,000.0	Autonomous vehicles	Autonomous vehicle design	63%	35%	2%
Databricks	$3,497.4	AI automation platforms	Database management	89%	9%	2%
Anduril	$2,315.1	Intelligent robotics	Drones	97%	1%	2%
Nuro	$1,032.0	Intelligent robotics	Industrial robots	92%	6%	2%
JD Digits	$2,127.9	Financial services	Intelligent banking	N/A	N/A	N/A
Horizon Robotics	$700.0	Processor design	Inference	N/A	N/A	N/A
Inflection	$1,565.0	AI core	Foundation models	2%	96%	2%
SambaNova Systems	$1,136.6	Processor design	Training/Inference	60%	38%	2%

Source: PitchBook • Geography: Global • *As of June 30, 2023
Note: Probability data based on PitchBook VC Exit Predictor methodology.

databricks

Founded 2013	**Last financing valuation** $38.0B	**Lead investor(s)** Counterpoint Global, Franklin Templeton Investments, Andreessen Horowitz, NEA
Employees 4,860	**Last financing** Raised $1.6B in a Series H	
Total raised $3.5B	**February 2020** Leader in Gartner Magic Quadrant for Data Science and Machine Learning Platforms	

Overview

Founded in 2013, Databricks offers a data science platform that includes AI-as-a-service (AIaaS) functionality with a suite of data science tools for data engineering, data warehousing, and ML algorithms. The company grew out of the open-source Apache Spark data science community and created an extensible product, called the Unified Data Analytics Platform, that can ingest data from enterprise silos and prepare it for cluster-based computing. Once an effective open-source product was in place, the company moved to a closed-source model and rapidly increased revenue beginning in 2016.

Databricks now offers a product suite on top of Apache Spark that includes an AI platform called Lakehouse AI optimized for generative AI with data storage, a model training pipeline, and model serving and monitoring. It also includes a data lake, which integrates unstructured data in a central database for analytics, and data security. The company has focused on the generative AI opportunity, training a custom LLM called Dolly that can run more efficiently than GPT-4 and achieve competitive results on question-answering tasks. The model is open-source and rapidly grew to 10,000 GitHub stars. The company is adding to its infrastructure capabilities as well by acquiring AI data storage startup Rubicon, hardware acceleration startup MosaicML for $1.3 billion, and AI data governance startup Okera. We believe the company is surpassing its peer Snowflake in AI capabilities.

About PitchBook Industry and Technology Research

Independent, objective, and timely market intel

As the private markets continue to grow in complexity and competition, it's essential for investors to understand the industries, sectors and companies driving the asset class.

Our Industry and Technology Research provides detailed analysis of nascent tech sectors so you can better navigate the changing markets you operate in—and pursue new opportunities with confidence.

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