

# Startup Insights



### **Executive Summary**

The startup ecosystem is a vibrant, ever-evolving landscape where innovation meets opportunity. In this high-stakes arena, the extended network of a founder can make a big difference. That's why at J.P. Morgan we continue to grow our robust network of founders, investors, and partners to support the startup ecosystem. This report highlights common traits of proven founders, and where and what the current batch are building. By working closely with our customers, we witness emerging or uncovered trends before they hit the mainstream. We'll analyze some in this report, including the AI and robotics hotspot that is Pennsylvania.

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# Contents





# Founder Insights

Unicorn founders' backgrounds; Seed stage startup activity.

### How to build a unicorn: Education, experience, expertise



#### U.S. UNICORN FOUNDER TRAITS<sup>1</sup>

Notes: 1) Unicorns founded since 2014. Top-ranked universities are based on 2024 U.S. News Best Colleges. Serial entrepreneurs founded more than one startup. Graduate degrees include M.S, M.A, and Ph.D. Tech executive includes VP/director roles and above, including C-suite roles. 2) First financings for VC-backed, U.S.-based startups. Date when startup hits \$1B valuation is considered unicorn birth.



U.S. FIRST FINANCINGS & RATIO OF FIRST FINANCINGS-TO-UNICORN BIRTHS<sup>2</sup>

### Decisions, decisions: Where and what seed founders are building

### U.S. CITIES RANKED BASED ON 2023 SEED DEAL ACTIVITY<sup>1</sup>

Rank	City	Rank change 2013 to 2023	Austin's grown 4.
1	New York, NY	= 0	over the Dubbed '
2	San Francisco, CA	= 0	Austin h
Т3	Austin, TX	▲ 1 ····	vent mirroring
Т3	Los Angeles, CA	= 0	benefits and Sa
4	Chicago, IL	▲ 1	(investor
5	Boston, MA	▼ 1	corporat lower c

Austin's deal flow has grown 4.8% annually<sup>2</sup> over the last decade. Dubbed "Silicon Hills," Austin has become a venture-hub, mirroring many of the benefits of New York and San Francisco (investors, incubators, corporates) but with a lower cost of living.

### TOP SECTOR FOR EACH CITY BASED ON 2023 SEED DEAL ACTIVITY^2

Rank	City	Top Sector
1	New York, NY	SaaS
2	San Francisco, CA	AI
Т3	Austin, TX	SaaS
Т3	Los Angeles, CA	SaaS
4	Chicago, IL	AI
5	Boston, MA	AI

### SECTOR POSTIONING BASED ON 2023 MEDIAN SEED DEAL SIZE AND SEED DEAL COUNT GROWTH (2013-2023)



Notes: 1) Data used is city-specific. 2) AI = artificial intelligence and machine learning.



## Sector Insights

AI boosted by new innovations; Fintech benefits from demographic trends,

### Towards the singularity: New innovations drive artificial intelligence investment

### TOP TEN SECTORS RANKED BY SHARE OF 2023 U.S. EARLY-STAGE<sup>1</sup> VENTURE DEAL ACTIVITY

Rank	Sector	Rank change 2013 to 2023
1	SaaS	= 0
2	Artificial intelligence	= 0
3	Fintech	▲ 2
4	Healthtech	= 0
5	Mobile	▼ 2
6	Life sciences	= 0
7	Big data	= 0
8	LOHAS & wellness <sup>2</sup>	▲ 1
9	E-commerce	▼ 1
10	Cleantech	▲ 3

#### VOLUME OF AI<sup>3</sup> RESEARCH PAPERS BY FOCUS AREA



Compared to their software counterparts, early-stage AI hardware startups have raised more capital per deal since 2019. Recently, the amount raised per deal has been converging, in part due to the cost of compute required to run AI models. This consequence may be why AI hardware startups have doubled their share of funding over the last decade (from ~10% to ~20%), with an emphasis on cloud computing solutions and new efficient chip designs (and AVs).

Notes: 1) Early-stage (ES) = seed and series A. 2) LOHAS = lifestyle of health and sustainability. 3) AI = artificial intelligence and machine learning.

#### U.S. EARLY-STAGE AI AND ALL VC FUNDING INDEXED (2013 = 100)



2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

### U.S. EARLY-STAGE AI FUNDING BY SOFTWARE AND HARDWARE SUBVERTICALS



Horizontal platforms (software)

Autonomous machines (hardware)Vertical applications (software)

### Finance at your fingertips: Fintech growth driven by shifts in preferences

### TOP TEN SECTORS RANKED BY SHARE OF 2023 U.S. EARLY-STAGE<sup>1</sup> VENTURE DEAL ACTIVITY

Rank	Sector	Rank change 2013 to 2023
1	SaaS	= 0
2	Artificial intelligence	= 0
3	Fintech	▲ 2
4	Healthtech	= 0
5	Mobile	▼ 2
6	Life sciences	= 0
7	Big data	= 0
8	LOHAS & wellness <sup>2</sup>	▲ 1
9	E-commerce	▼ 1
10	Cleantech	▲ 3

#### U.S. SEED<sup>2</sup> FINTECH DEALS BY SELECT SEGMENT



#### U.S. WEALTH HELD BY SELECT GENERATIONS



#### USE OF DIGITAL WALLETS IN THE U.S.



Notes: 1) Early-stage (ES) = seed and series A. 2) Includes pre-seed deals. 3) Excludes the silent generation and above.

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# **Regional Insights**

San Francisco rides the AI wave; Miami establishes itself as a venture hub.

### Artificial intelligence investment brings San Francisco a new lease on life



TOP TEN CITIES RANKED BY SHARE OF 2023

#### SHARE OF SAN FRANCISCO (SF) SEED DEAL ACTIVITY BY VERTICAL<sup>3</sup>



#### SF TOTAL SEED DEAL BREAKDOWN BY SELECT VERTICALS BETWEEN 2022 AND 2023



SF has galvanized its reputation as an AI hotbed, with some dubbing part of the city "Cerebral Valley." Its strong AI talent base, proximity to top universities, and high concentration of VC investors has meant many AI startups have taken office space in the city.

Notes: 1) Early-stage (ES) = seed and series A. 2) Data used is city-specific. 3) AI = artificial intelligence and machine learning. Vertical categories are not mutually exclusive.

### Welcome to Miami: A new place in the sun for startup founders

TOP TEN CITIES RANKED BY SHARE OF 2023 U.S. EARLY-STAGE<sup>1</sup> VENTURE DEAL ACTIVITY<sup>2</sup>

Rank	Sector	Rank change 2013 to 2023
1	New York, NY	= 0
2	San Francisco, CA	= 0
3	Austin, TX	▲ 1
4	Los Angeles, CA	▼ 1
5	Boston, MA	= 0
6	Chicago, IL	▲ 1
7	Seattle, WA	▼ 1
8	Miami, FL	▲ 4
9	San Diego, CA	▼ 1
10	Denver. CO	▼ 1



Accelerated by the COVID-19 pandemic, migration to Florida has been rising, including for "techies." Factors like the lower cost of living, a favorable tax environment, and government support has energized the tech ecosystem, especially in Miami. Tech companies like Nvidia, Uber, and Tesla have also expanded their footprint in the state.

MIAMI EARLY-STAGE VENTURE ACTIVITY



Although Miami was initially known as a crypto hotspot, the city rode the wave of momentum and transitioned into a legitimate tech hub. Beyond deals and dollars, median pre-valuation has doubled over the past five years, from \$8.5M to \$17.5M. This stepup illustrates the maturing of the Miami startup ecosystem.

Notes: 1) Early-stage (ES) = seed and series A. 2) Data used is city-specific. 3) 2020 state-to-state migration data is not available. Dotted line is a line of best fit.



# Case Study

Research and robotics in Pennsylvania.

### **Research and robotics in Pennsylvania**

AI-RELATED INNOVATION WAVES DRIVE

PENNSYLVANIA'S (PA) VENTURE FUNDING<sup>1</sup>



NUMBER OF ROBOTICS<sup>2</sup> STARTUPS THAT HAVE RAISED

\$50M+ AND SHARE OF THEIR FOUNDERS BY UNIVERSITY

#### BREAKDOWN OF ROBOTICS FOUNDERS' DEGREE TYPES **BY UNIVERSITY**

Notes: 1) AI = artificial intelligence and machine learning. 2) Robotics includes robotics, drones, and autonomous vehicles.

57%

45%

20%

40%

Univ. of Michigan

Cornell Univ.

Caltech

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