# SG NATSEC100 2023 EDITION



"U.S. national security relies on private sector innovation to remain at the cutting-edge of military technology and to compete in the era of great power competition. I'm pleased to see the nation's top-tier startups in the defense and national security space recognized on this list."

-Congressman Rob Wittman, Vice Chairman, House Armed Services Committee

SV Silicon Valley DG Defense Group July 4<sup>th</sup>, 2023

# NatSec100 & the Future of National Security Innovation

4 July 2023

The NatSec100 is our newly developed, annual ranked list of the top venture-funded defense and dual-use startups. It was developed to offer a data-driven snapshot of the evolving technosecurity ecosystem.

The list is by no means a perfect indicator of the future success or failure of the companies it comprises; rather, it is intended to **drive conversation** around the emerging tech ecosystem in national security. While the DOD has long resisted "picking winners,"<sup>1</sup> the NatSec100 ranks companies based on which are the comparative front-runners in the defense and national security space each year.

The top-tier startups on this year's inaugural NatSec100 have collectively attracted an impressive \$42 billion<sup>2</sup> in funding to date.<sup>3</sup> They are developing a variety of technological capabilities vital to our national security and are funded by the world's leading venture capital firms. And yet, the revenue generated by these companies from the federal government currently stands somewhere between \$2 and \$5 billion, a figure markedly lower than their collective funding.<sup>4</sup>

This discrepancy highlights a critical issue for policy makers: without substantial contracts from government customers, venture investors will put their money elsewhere. The result would be new defense-focused and dual-use startups finding it impossible to raise private capital, and existing ones pivoting to commercial customers or going out of business. This would have significant negative ramifications for our future national security capabilities.

As SVDG previously outlined in our <u>Emerging Tech Readiness article</u>,<sup>5</sup> venture-funded defense and dual-use startups offer three advantages that make them particularly useful to national security: speed, scale, and selection. Ultimately, tech startups can offer a "catalog" of new, leading-edge technologies that buyers in need of immediate capabilities can access overnight. However, to date the national security sector has failed to provide consistent and sufficient contracts for emerging technology companies that would help these startup companies advance more quickly from their early and growth stages into profitability. This lack of sustainable government revenue may discourage both startups and their investors from participating in the national security market.

This is not to suggest that venture-backed companies have no future in the national security market. Rather, the DOD and IC should evaluate their own capability development and

<sup>4</sup> The companies included on this list are all private, so their revenue numbers are not public. We estimated annual revenue numbers from non-public information and public government contracts.

<sup>&</sup>lt;sup>5</sup> See our article, "Emerging Tech Readiness"" <u>https://www.siliconvalleydefense.org/initiatives/etr</u>



<sup>&</sup>lt;sup>1</sup> See our article, "From Ukraine to RNDF: It's time for the DOD to Bet Big and Pick Winners," <u>https://www.siliconvalleydefense.org/initiatives/reagan-article-2022</u>

<sup>&</sup>lt;sup>2</sup> Pitchbook data

<sup>&</sup>lt;sup>3</sup> To put that into perspective, DARPA has spent slightly less than \$20 billion on R&D over the past five years.

acquisition strategies and then take appropriate measures to ensure the sustained viability of defense and dual-use startups. To date, the DOD and IC have provided lip service and door prizes but no sustained commitments to ensure that the venture-funded defense and dual-use startups become part of major defense acquisition programs. The irony is that while the DOD/IC have been unable to make serious commitments to this ecosystem, China has embraced Civil/Military fusion, tightly integrating "commercial" startups and quickening China's speed of innovation.

Rank	Name	Description	Total Funding Raised (in Millions)	Headquarters	CEO	Year Founded
1	<u>SpaceX</u>	Develops spacecraft to make life multi-planetary; develops space launch vehicles to increase accessibility of materials	8,999.86	Hawthorne, CA	<u>Elon Musk</u>	2002
2	Anduril	Develops defensive AI surveillance technology for national security	2,315.10	Costa Mesa, CA	Brian Schimpf	2017
3	Databricks	Data analytics platform to simplify data	3,497.36	San Francisco, CA	<u>Ali Ghodsi</u>	2013
4	Sierra Space	Commercial space transportation technology to facilitate life in space	1,438.22	Louisville, CO	Tom Vice	2021
5	<u>Chainalysis</u>	Cryptocurrency investigation and compliance software	536.72	New York, NY	Jonathan Levin	2014
6	Axiom Space	Operates an international commercial space station	274.2	Houston, TX	Michael Suffredini	2016
7	Relativity	Develops autonomous rocket factory and launch services for satellites	1,334.54	Long Beach, CA	<u>Tim Ellis</u>	2015
8	<u>Grafana Labs</u>	Developer of a performance monitoring platform	569.23	New York, NY	<u>Raj Dutt</u>	2014
9	Shield Al	Al based drone technology	575	San Diego, CA	Ryan Tseng	2015
10	<u>Dataiku</u>	Centralized data platform supporting data analytics and enterprise AI development	851.8	New York, NY	Florian Douetteau	2013
11	Skydio	Al drones that deliver power and flyng cameras	634.68	Redwood City, CA	Adam Bry	2014
12	Scale Al	Data-centric platform accelerates Al training and development	602.86	San Francisco, CA	Alexandr Wang	2016
13	<u>ICON</u>	3D prints homes in developing countries	443.02	Austin, TX	Eric Davis	2017
14	<u>Lyten</u>	Lithium-sulfur battery technology	358.5	San Jose, CA	Dan Cook	2015
15	SandboxAQ	Practical AI quantum software	500	New York, NY	Jack Hidary	2022
16	<u>Dragos</u>	Infrastructure cybersecurity software	358.2	Hanover, MD	Robert M. Lee	2016
17	<u>Slingshot</u> <u>Aerospace</u>	Space simulation and analytics platform	81.82	El Segundo, CA	Melanie Stricklan	2017
18	Venus Aerospace	Developing hypersonic aircraft	39.1	Houston, TX	Sassie Duggleby	2020
19	<u>DataRobot</u>	Enterprise AI platform to automate data	1,048.21	Boston, MA	<u>Debanjan Saha</u>	2012
20	<u>Ursa Major</u> Technologies	Developer of turnkey propulsion technologies for engines	236.1	Berthoud, CO	Joe Laurienti	2015

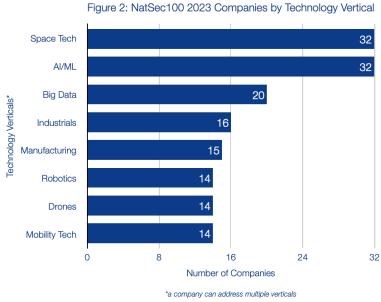
#### Figure 1: The NatSec100 2023 Top 20 Companies<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> The complete NatSec100 2023 list is included at the end of this report.



#### Methodology

Silicon Valley Defense Group (SVDG) collaborated with Franklin Templeton and Balyasny Asset Management to compile the NatSec100 list, taking into account the Office of the Under Secretary of Defense for Research and Engineering (OUSD(R&E))'s <u>14 Critical Technology</u> Areas<sup>7</sup> and private conversations with senior leaders from the DOD and intelligence community. Eligible companies are all engaged in the Department of Defense (DOD) critical technology areas,<sup>8</sup> and the rankings reflect weighted, quantitative factors that allowed us to analyze companies' size, growth, and momentum. Specifically, we analyzed headcount growth, total capital raised, and fundraising momentum, to assign a weighted score to each company. While these metrics are by no means perfect indicators of success for these companies, they demonstrate momentum in the world of venture-backed growth. All data gathered for the NatSec100 2023 is through the end of April 2023.



## Critical Technology Areas and Investments: The Current Landscape

This year's NatSec100 companies roughly align with Office of the Under Secretary of Defense for Research and Engineering (OUSD(R&E))'s <u>14 Critical</u> <u>Technology Areas.<sup>9</sup> In particular,</u> companies specializing in space technology and artificial intelligence/machine learning comprised the majority of the NatSec100. This is perhaps unsurprising due to the rapid pace of AI/ML development over the past year in areas like generative

<sup>2</sup> past year, in areas like generative AI, natural language processing, computer vision, large language

models, etc. Space-related technologies have also accelerated, due in part to the commercialization of space and the significant increase in domestic launch capacity driven by SpaceX's Falcon 9 rocket.

Space has historically been an important national security domain, and the NatSec100 is evidence that this trend is continuing.<sup>10</sup> Space technology developed by NASA and the DOD is illustrative of the traditional trend wherein technology created for national security purposes is later deployed for commercial use cases as well. The development of satellite communications

<sup>&</sup>lt;sup>10</sup> See <u>https://www.nasa.gov/centers/johnson/pdf/584720main\_Wings-ch2c-pgs42-52.pdf</u>



<sup>&</sup>lt;sup>7</sup> See https://www.cto.mil/wp-content/uploads/2022/02/usdre\_strategic\_vision\_critical\_tech\_areas.pdf

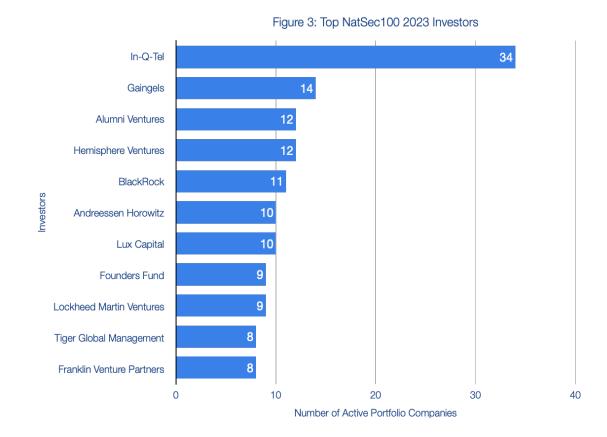
<sup>&</sup>lt;sup>8</sup> See <u>https://www.cto.mil/usdre-strat-vision-critical-tech-areas/</u>

<sup>&</sup>lt;sup>9</sup> See https://www.cto.mil/wp-content/uploads/2022/02/usdre\_strategic\_vision\_critical\_tech\_areas.pdf

and GPS is perhaps the best example of how space has historically been the ultimate dual use domain.<sup>11</sup> The acceleration of this dual use trend is exemplified by the space tech companies listed in the NatSec100, nearly all of which serve both government and commercial customers across various space subsectors, including launch, manufacturing, and in-space services.

#### **Key Investors**

This year's NatSec100 investors include mission-focused funds, prolific volume investors, toptier venture capital (VC) firms, and financially-driven firms with a national security focus. Mission-focused funds like In-Q-Tel and Lockheed Martin Ventures are a natural fit for defense investing, and their mission is to identify and invest in companies developing cutting-edge technologies that serve United States national security interests. In-Q-Tel has invested in 34 of the 100 companies on this list, significantly more than any other investment group, albeit with relatively lower funding levels.



"IQT takes pride in our efforts to anticipate the needs of the intelligence and defense communities, making strategic investments in dual-use technology that our government partners can leverage to enhance national security for the U.S. and its allies," – Steve Bowsher, President, IQT

<sup>&</sup>lt;sup>11</sup> See <u>https://aerospace.org/article/brief-history-gps</u>



Alumni Ventures and Gaingels are prolific volume investors: Alumni Ventures was the most active venture capital firm in the US in 2022, while Gaingels was the third with 273 deals.<sup>12</sup> This may explain their appearance on this list despite not having a specific national security or deep tech thesis. Leading VC firms like <u>Andreessen Horowitz</u>, <u>Founders Fund</u>, and <u>Lux Capital</u> have investors dedicated to deep tech and moonshot technologies, which tend to align with the DOD's critical technology areas.

#### **Dual-Use Technologies**

Some of the dual-use startups on the NatSec100 might be surprising because they're not traditional national security companies. At #13 on the list is ICON, a startup that 3D-prints homes. The Army awarded ICON a \$9M contract to explore printing housing for the military,<sup>13</sup> and NASA funds ICON's development of a space-based construction system intended to support lunar and Martian colonies.<sup>14</sup> Whoop, the wearable health-monitoring startup at #41 on the list, has DOD contracts to support soldier health and well-being. And <u>Chainalysis</u>, the crypto forensics startup, helps the intelligence community monitor criminal activity and state-sponsored activity on the blockchain. Any startup that fits the DOD technology categories is eligible for the NatSec100, provided they have evidence of national security customers. As a result, the NatSec100 includes a variety of commercially focused companies who have also found federal market success.

"From day one, ICON embraced a dual-use vision, fueled by our determination to tackle both the global housing crisis and revolutionize military construction, while also partnering with NASA to build humanity's first habitat on the moon. To fulfill these goals, forging a profound partnership across the government became an imperative,"



-Evan Loomis, Co-Founder, ICON

13 https://www.usaspending.gov/award/CONT\_AWD\_FA300219PA177\_9700\_-NONE-\_-NONE-

<sup>&</sup>lt;sup>14</sup> <u>https://www.iconbuild.com/off-world-construction</u>

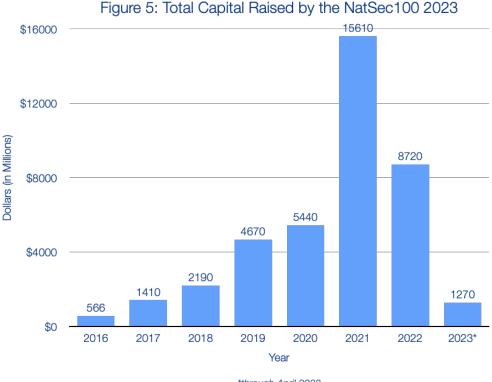


<sup>&</sup>lt;sup>12</sup> See <u>https://pitchbook.com/news/articles/global-league-tables-2022-annual</u>

#### **Critical Technology Investments: Trendlines**

Last year, <u>SpaceX</u> and Anduril constituted the two largest fundraises in all of venture capital, receiving \$1.97B and \$1.48B respectively.<sup>15</sup> However, deal count and capital raised actually declined from 2021, and has continued to decline so far in 2023. At its height in 2021, 97 startups on the NatSec100 received a total of \$15.61B, and in 2022, 69 startups on the list received a total of \$8.72B. But moving past SpaceX and Anduril, there's a decline in total capital raised by the remainder of the NatSec100 list.

Policymakers should be wary of taking the \$42B raised to date by NatSec100 companies for granted. The capital and deal flow of 2021 were likely spurred on by low-interest rates and a bullish stock market. In 2023, the market is much more uncertain. If this generation of defense tech startups fails due to a lack of government contracts, VC-funded defense innovation may decline precipitously.





"For the first time ever, our national security is inexorably intertwined with commercial technology. The DoD's traditional suppliers of defense tools, technologies, and weapons – the prime contractors and federal labs – are no longer the leaders in these next-generation technologies. Venture capital and startups have spent 50 years institutionalizing the rapid delivery of disruptive innovation and as we're seeing on the Ukrainian battlefield, they are changing the balance of power."

-Steve Blank, SVDG Advisory Board Member

<sup>15</sup> Pitchbook data

### **Policy Recommendations**

#### **Better Reporting Metrics**

It's important to track the success of defense and dual-use startups in the national security market to judge to health of the national security innovation ecosystem. These metrics should monitor private funding and company growth, as well as government contracts and procurement of emerging technologies. It should track beneficiaries of the <u>Defense Innovation</u> <u>Unit's</u> (DIU) Other Transaction Authorities (OTAs), the recipients of AP-FIT grants, the Title III/Defense Production Act winners, and those that secure <u>AFWERX</u> STRATFI/TACFI awards. These will provide a clearer picture of the health of the national security innovation ecosystem and the effectiveness of DOD/IC efforts to support innovative challengers to the established defense industrial base.

#### **Private Capital Partnership Consideration**

Another step towards enhancing our techno-security landscape is to consolidate DOD efforts in connecting with private capital. These efforts, currently distributed across various departments like the Office of Strategic Capital, DIU, and Service-led initiatives, should be streamlined and consolidated. This centralization would improve efficiency, coordination, and accountability, and it could further be enhanced by linking with Intelligence Community efforts, like In-Q-Tel.

#### **Nurturing New and Emerging Suppliers**

If the DOD is truly committed to cultivating an *emerging* industrial base to supplement the *established* industrial base, it is essential to act decisively. This means seeking out and insisting on the inclusion of new suppliers, with a specific focus on those without a prior record of performance. It's an approach that promotes innovation and drives competitiveness.

The Space Force's approach with the new National Security Space Launch (NSSL) serves as a good model. Their Request for Proposals (RFP) expanded the supplier base, increasing the number of winners from two in the previous award to five in 2023. This not only broadened the playing field but also opened opportunities for 1-3 members of the NatSec100 to secure a contract, even without prior space exploration credentials.

However, not all sectors are embracing this forward-thinking strategy. A case in point is the Over-the-Horizon (OTH) munitions sector. The Ukraine conflict has highlighted the urgent need for new solid munition suppliers, like <u>Ursa Major</u> and <u>Xbow</u>. Yet, the first significant <u>Defense</u> <u>Production Act</u> (DPA) award was granted to the underperforming incumbent. This represented a missed opportunity to invest 10-20% of the contract in new entrants, which would have stimulated innovation and competition.

To ensure the growth and resilience of our national security infrastructure, it is paramount to incorporate and nurture emerging suppliers. This strategy fosters a more diverse and adaptable industrial base, better equipped to face the evolving challenges of the 21st century.



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3	Databricks	data	3,497.36	CA	<u>Ali Ghodsi</u>	2013
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12	Scale Al	Data-centric platform accelerates Al training and development	602.86	San Francisco, CA	Alexandr Wang	2016
13	<u>ICON</u>	3D prints homes in developing countries	443.02	Austin, TX	Jason Ballard	2017
14	<u>Lyten</u>	Lithium-sulfur battery technology	358.5	San Jose, CA	Dan Cook	2015
15	SandboxAQ	Practical AI quantum software	500	New York, NY	Jack Hidary	2022
16	Dragos	Infrastructure cybersecurity software	358.2	Hanover, MD	Robert M. Lee	2016
17	<u>Slingshot</u> Aerospace	Space simulation and analytics platform	81.82	El Segundo, CA	Melanie Stricklan	2017
18	Venus Aerospace	Developing hypersonic aircraft	39.1	Houston, TX	Sassie Duggleby	2020
19	DataRobot	Enterprise AI platform to automate data	1,048.21	Boston, MA	<u>Debanjan Saha</u>	2012
20	<u>Ursa Major</u> Technologies	Developer of turnkey propulsion technologies for engines	236.1	Berthoud, CO	Joe Laurienti	2015
21	Rubrik	Data automation for hybrid clouds	1,056.73	Palo Alto, CA	Bipul Sinha	2014
		Integrated SDN platform to integrate cloud, networking, and security				
22	Versa Networks	services	330.25	Santa Clara, CA	Kelly Ahuja	2009
23	ThoughtSpot	Enterprise analytics platform centralizes and accelerates data	677.45	Mountain View, CA	<u>Sudheesh Nair</u>	2012
24	PsiQuantum	First utility-scale quantum computer	665	Palo Alto, CA	<u>Jeremy O'Brien</u>	2016
25	Capella Space	Satellite radar imagery technology	283.99	San Francisco, CA	<u>Payam</u> Banazadeh	2016
26	<u>Stoke Space</u> <u>Technologies</u>	Developer of reusable rockets	74.54	Kent, WA	Andy Lapsa	2019



27	SambaNova	Hardware for accelerated analytics	1 136 60		Podrigo Lippo	2017
27	<u>Systems</u>	and Al	1,136.60	Palo Alto, CA	Rodrigo Liang	2017
28	Applied Intuition	Advanced simulation infrastructure software for autonomous vehicles	351.5	Mountain View, CA	<u>Qasar Younis</u>	2017
29	<u>Epirus</u>	HPM technology software to counter UAS	290.59	Torrance, CA	<u>Kenneth</u> Bedingfield	2018
30	Impulse Space	Orbital maneuvering vehicles for economical delivery	30	El Segundo, CA	Thomas Mueller	2021
31	<u>Blue Origin</u>	Space technologies for sustainable expansion	500	Kent, WA	Bob Smith	2000
32	<u>CloudBees</u>	Automated cloud platform for software delivery	454.55	San Jose, CA	Anuj Kapur	2010
33	Cerebras Systems	Al-accelerating computing chips	723	Sunnyvale, CA	Andrew Feldman	2015
34	Astranis	Satellite internet company for regional connectivity and broadcasting	393.92	San Francisco, CA	John Gedmark	2015
35	ABL Space Systems	Low-cost vehicles to launch small satellites	419.35	El Segundo, CA	Harry O'Hanley	2017
36	Inflegtion	Develops software-configured, quantum-enabled products	184.5	Louisville, CO	Scott Faris	2007
37	VAST Data	Data platform designed to accelerate enterprises	263	New York, NY	Renen Hallak	2016
38	EOI Space	Low-flying satellites to collect ultra- high-resolution imagery	11.07	Louisville, CO	Christopher Thein	2017
39	Muon Space	Develops climate-focused satellite constellation technology	35	Mountain View, CA	Jonny Dyer	2021
40	Opaque Systems	First confidentital AI platform	22	San Francisco, CA	Rishabh Poddar	2020
41	<u>Whoop</u>	Wearable performance optimization device	407.4	Boston, MA	Will Ahmed	2011
42	Saildrone	Autonomous marine surface vehicles	186.2	Alameda, CA	Richard Jenkins	2012
43	Loft Orbital	Satellite platform to assist the launch and operations of satellites	156.16	San Francisco, CA	<u>Pierre-Damien</u> Vaujour	2017
44	RED 6	Augmented reality (AR) for military training applications	110.9	Orlando, FL	DANIEL ROBINSON	2018
45	<u>SiMa.ai</u>	Software-centric platform accelerates high-performance machine learning inference	187.8	San Jose, CA	<u>Krishna</u> Rangasayee	2018
46	<u>Formlabs</u>	Printing platform designed to print parts with complex geometries	253.13	Somerville, MA	<u>Maxim Lobovsky</u>	2011
47	<u>BigID</u>	Data-driven protection and privacy compliance platform	196.26	New York, NY	Dimitri Sirota	2016
48	Lambda	Software-enhanced compute systems and GPU cloud services	68.21	San Jose, CA	<u>Stephen Balaban</u>	2012
49	<u>Vannevar Labs</u>	Machine learning products for critical national security problems	91.1	Palo Alto, CA	Brett Granberg	2019
50	<u>Fictiv</u>	On-demand digital manufacturing ecosystem	195.62	San Francisco, CA	Dave Evans	2013
51	<u>Ayar Labs</u>	Electronic-photonic chipset for computers	195.1	Emeryville, CA	<u>Alex Wright-</u> <u>Gladstein</u>	2015
52	Federated Wireless	CBRS shared spectrum technology for wireless industry	206	Arlington, VA	Iyad Tarazi	2012
53	Dedrone	Counter-drone security technology platform	133.01	Sterling, VA	<u>Aaditya</u> Devarakonda	2014
54	RRAI	Develops autonomous and semi- autonomous transportation vehicles	228	Clarksburg, MD	Alberto Lacaze	2002
55	Merlin Labs	Autonomous flight technology designed for fixed-wing aircraft	246	Boston, MA	Matt George	2018



56	Hermeus	Developer of a hyporsonia siroraft	118.9	Atlanta CA	AJ Piplica	2018
00		Developer of a hypersonic aircraft	110.3	Atlanta, GA		2010
57	SparkCognition	Al to analyze increasingly complex data stores	340.49	Austin, TX	<u>Amir Husain</u>	2013
58	Firefly Aerospace	Develops launch vehicles for commercial launches to orbit	30.2	Cedar Park, TX	Bill Weber	2017
59	<u>Kymeta</u>	Low-power satellite antenna for mobile satellite-cellular connectivity	524.87	McLean, VA	<u>S. Douglas</u> <u>Hutcheson</u>	2012
60	<u>UVeye</u>	Vehicle inspection systems to detect threats or modifications of vehicles	201.56	Teaneck, NJ	<u>Amir Hever</u>	2016
61	<u>Airspace</u> <u>Technologies</u>	Technology-enabled logistic platform to expedite deliveries	138.5	Carlsbad, CA	<u>Nicholas Bulcao</u>	2016
62	Boom Supersonic	Manufactorer of sustainable supersonic aircraft	269.13	Dove Valley, CO	Blake Scholl	2014
63	<u>Sepio</u>	Risk management platform	37	Rockville, MD	Yossi Appleboum	2016
64	Nozomi Networks	Online cybersecurity platform	174.05	San Francisco, CA	<u>Edgard</u> Capdevielle	2013
65	Gecko Robotics	Robots for comprehensive asset inspections	120.45	Pittsburgh, PA	Jake Loosararian	2013
		Microwave-based plasma		North Andover,		
66	<u>6K</u>	technology to poduce nanomaterials	214.1	MA	Aaron Bent	2014
67	Interos	Logistics assurance platform to manage supply-chain risk	258.62	Arlington, VA	Jennifer Bisceglie	2005
68	<u>Albedo</u>	Constellation of satellites that capture both visible and thermal imagery simultaneously	60.22	Broomfield, CO	Topher Haddad	2020
69	<u>Brinc</u>	2-way communication drones and aerospace technology systems	82.2	Seattle, WA	Blake Resnick	2017
70	Swift Navigation	GPS technology for automated navigation for autonomous applications	200.18	San Francisco, CA	<u>Tim Harris</u>	2012
71	Rebellion Defense	Mission-focused, defense and security AI products	223.8	Washington, DC	Barry Sowerwine	2019
72	ATLAS Space Operations	Satellite communications optimization control software	34.8	Traverse City, MI	Sean McDaniel	2015
73	Liquid Instruments	Developer of modern test and measurement devices based on a software-configurable hardware platform	58.96	San Diego, CA	Daniel Shaddock	2014
74	Oshit Fah	Space refueling technology designed to offer remote monitoring	00.15	Lafavetta CO	Deniel Feber	0010
74	<u>Orbit Fab</u> Firehawk	services Hybrid rocket engines with 3D-	29.15	Lafayette, CO	Daniel Faber	2018
75	Aerospace	printed fuel	26.75	Addison, TX	Will Edwards	2019
76	Morpheus Space	Sustainaibility-orietned spacecraft propulsion systems	28.07	El Segundo, CA	Daniel Bock	2018
77	<u>X-Bow</u>	Affordable rocket propellant for orbital access	29.2	Huntsville, AL	Jason Hundley	2016
78	<u>Mirantis</u>	Technology platform for public open cloud infrastructure	254.07	Campbell, CA	Adrian Ionel	1999
79	Rescale	Cloud-based software and hardware infrastructure platform for scientific and engineering simulations	157.4	San Francisco, CA	Joris Poort	2011
80	Voyager Space	Aviation and aerospace technology for space exploration	177.8	Denver, CO	<u>Dylan Taylor</u>	2019
81	HawkEye 360	space-based radio frequency mapping and analytics system for geospatial data analytics	305	Herndon, VA	John Serafini	2015
	Automation	Workforce-oriented Al robotic	000			2010
82	Anywhere	process automation software	1,172.97	San Jose, CA	<u>Mihir Shukla</u>	2003



83	Truera	Model Intelligence platform for business impact	42.28	Redwood City, CA	William Uppington	2019
84	Second Front Systems	Accelerating commercial software development, testing, and deployment into national security networks	44.23	Wilmington, DE		2014
85	Phantom Space	Democratizing space transportation technology	26.66	Tucson, AZ	Jim Cantrell	2019
86	Xwing	Autonomous flight technology for various aircraft	58	San Francisco, CA	Marc Piette	2016
87	LeoLabs	Secure commercial operations in low Earth orbit	82	Menlo Park, CA	Daniel Ceperley	2016
88	<u>SkySafe</u>	Drone defense technology for airspace security	45	San Diego, CA	Grant Jordan	2015
89	Spaceflight Industries	Aerospace launch mission services	265.75	Bellevue, WA	<u>Tiphaine</u> Louradour	2009
90	<u>Snorkel</u>	Al tool to extract information from text documents	138.25	Redwood City, CA	Alexander Ratner	2015
91	Hypori	Virtual mobile infrastructure to eliminate security risks	30.5	Reston, VA	Jared Shepard	2021
92	Stellar Cyber	Automated security operations platform	59.8	San Jose, CA	Changming Liu	2015
93	<u>Shift5</u>	Cybersecurity platform to defend operational technology platforms	105.5	Arlington, VA	Josh Lospinoso	2019
94	<u>Primer</u>	Al used to automate the analysis of massive datasets	237	San Francisco, CA	Sean Moriarty	2014
95	<u>SpiderOak</u>	Collaboration tool, online backup and file hosting service	36.9	Lenexa, KS	Dave Pearah	2007
96	Xplore	Commercial space services for the flight of instruments out of earth's orbit	25.2	Redmond, WA	Jeff Rich	2012
97	<u>CesiumAstro</u>	Software-defined communication payloads for airborne and in-orbit platforms	88.2	Broomfield, CO	Shey Sabripour	2017
98	<u>Eclypsium</u>	Device security platform unguarded firmware and hardware defense	63.04	Portland, OR	<u>Yuriy Bulygin</u>	2017
99	Varda Space	Platform for in-space manufacturing	42	El Segundo, CA	Will Bruey	2020
100	Elroy Air	Autonomous aircraft systems and software to expedite shipping services	56	San Francisco, CA	David Merrill	2016

