

The background of the entire page is composed of a series of thin, overlapping, wavy lines in shades of green and purple. These lines create a sense of motion and depth, resembling a stylized, abstract representation of a globe or a complex network. The lines are most concentrated in the upper right and lower right corners, with some lines extending across the middle of the page.

The State of AI Talent 2025

zeki

Contents

Executive Summary	4
The State of AI Talent 2025	
Data and Methodology	6
Measurable ROI with Zeki	7
Companies that hire high-scoring Talent succeed faster	
Zeki Data Products	8
Zeki Predictions	
One The US Will No Longer Be the Destination of Choice of Top AI Talent in 2025	9
Two India Will Become a Consumer, Not a Provider, of Top AI Talent in 2025	13
Three Major AI Players in Europe and the Gulf States Will Redouble Efforts to Retain Their Supply of Top AI Talent	16
Four Google's Talent Concentration Will Set the Stage for LLM Dominance	20
Five London Will Be the New Epicenter for Responsible Technology	24
Six Big Pharma Will Play It Safe and Outsource High-Risk, High-Reward AI Drug Discovery	27
Seven Nvidia's Talent Magnetism Will Reinforce Its Innovation Leadership	30
Eight The Intersection Between Quantum and AI Will Grow but to the Detriment of Pure Quantum Companies	34
Nine AI Companies Will Widen Their Search for Talent at a Cost to Medical Research	36
Ten The Defence Sector Will Buck the Trend	39
Zeki Market Observation	42
Top AI Talent Will Increasingly Be Hidden	
Zeki Datasets	45
Index	46

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About Zeki

Talent is the missing alpha signal.

No amount of compute power or capital will overcome a lack of Top Talent inside companies promising to deliver Frontier AI innovations. Think DeepSeek vs. Theranos—one had limited compute and capital but incredibly high-quality Talent, and the other had robust compute and capital but never attracted the Talent needed to deliver on their promises.

All innovation begins with a human idea. Zeki Data identifies and tracks the world's Top AI Talent—individuals with proven track records of successfully testing the boundaries of AI science and engineering. Wherever they choose to work, groundbreaking innovation follows.

Our unique methodology and proprietary scoring system focuses on understanding and measuring the individual decisions Top AI Talent make and the impact of those decisions on their level of performance, teamwork, career path, influence, reputation and evolving skills.

This data intelligence generates 'frontier alpha signals' that track and anticipate the innovation potential of individuals and the companies and countries they work in.

Companies that select Talent with high Zeki scores achieve a 100 per cent increase in innovation compared to their competitors. Recruiters use Zeki to source the best Top AI Talent directly, particularly those who are not actively on the market. Investors use Zeki to spot opportunities ahead of the market.

Learn more at www.zekidata.com

Executive Summary

The State of AI Talent 2025

1. Top AI Talent will no longer view the US as their destination of choice.

Talent from overseas has enabled the US to build and maintain its dominance in AI. This supply chain is drying up rapidly as Top AI Talent is no longer incentivised to move to the US. We expect this trend to accelerate, with long-term negative economic consequences for the US.

2. India will pivot from Talent exporter to consumer.

A direct consequence of declining Talent flow to the US will be India's emergence as a major consumer of its own AI Talent, reversing its historical role as a global exporter. As the Indian government's AI Mission gains momentum, Top AI graduates are increasingly expected to pursue their careers in India. This trend will reshape the global Talent landscape, challenging traditional Talent flows and creating new opportunities for investors in the country.

3. Major AI players in Europe and the Gulf States will redouble Top AI Talent retention efforts.

As major economies reframe their overall supply chains in light of tariffs, Talent will be no exception. Major national players in AI will rapidly act to incentivise Top AI Talent to stay close to home. Canada and the UK are best placed to attract Talent back from the US, whilst other countries, such as the Gulf States, are likely to meet their AI ambitions much more rapidly as they continue to attract more Top AI Talent.

4. Google will take the dominant share of top LLM developers.

Google's aggressive acquisition of top large language model (LLM) developers has resulted in the company controlling 35 per cent of the market share. This positions Google for long-term dominance in GenAI, allowing it to potentially outpace competitors such as OpenAI and Meta.

5. London will fortify its standing as the centre for excellence in responsible AI.

With the presence of Google DeepMind and the AI Security Institute, London will strengthen its attraction to Top AI Talent in the field of responsible AI.

6. Big Pharma will play it safe with AI drug discovery.

Big Pharma has not competed with AI or biotech companies for the advanced expertise necessary to build in-house AI models. Instead, they will form partnerships or make acquisitions to access next-generation AI expertise seeking to reinvent drug discovery.

7. Nvidia will strengthen its innovation leadership.

Despite economic pressures and industry forecasts, Nvidia's ongoing ability to attract and retain Top AI Talent from competitors positions the company for continued leadership in innovation.

8. Pure quantum companies will lose the race for Talent as the intersection with AI grows.

Big Tech companies have traditionally attracted quantum computing Talent, but this trend now extends to AI firms as they race to broaden their Talent pool to tackle increasingly complex algorithmic and architectural challenges. Pure quantum companies are proving unable to compete.

9. AI brain drain will threaten medical research.

Technology companies will continue to recruit neuroscience and DNA nanotechnology experts at an alarming rate, putting medical research in these fields at a distinct disadvantage.

10. Defence sector hiring signals new era of autonomous warfare.

As technology companies slow their recruitment efforts, AI firms focused on defence will attract more elite Talent, especially in fields directly related to autonomous warfare.

Data and Methodology

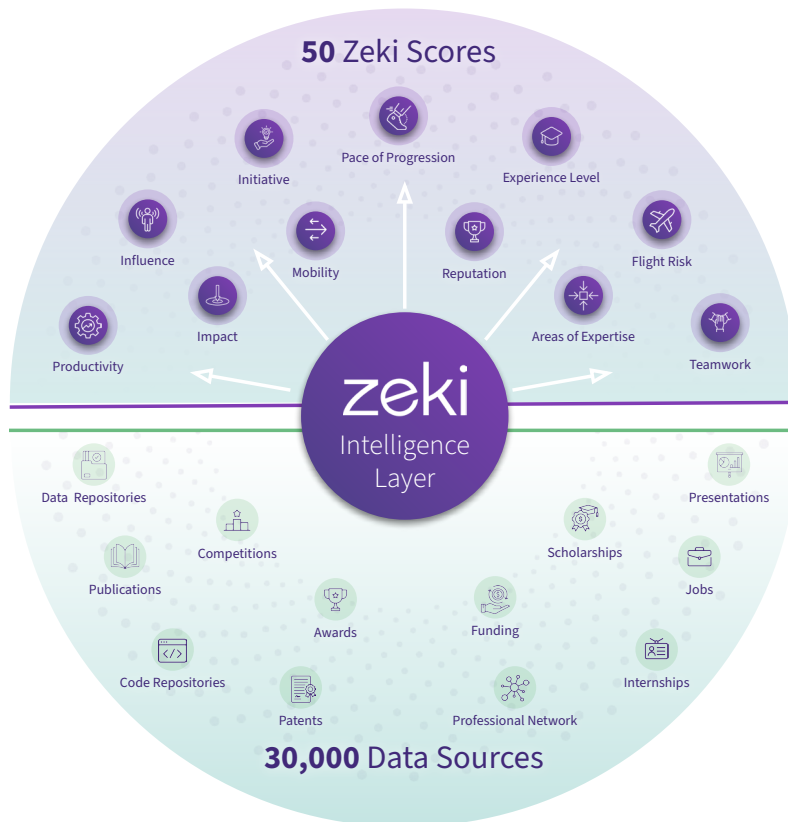
Zeki has identified 800,000 Top AI Talent globally (outside of China). These individuals have a proven track record in producing new discoveries in AI, either by contributing to research, data depositories or new models. They specialise in 230 unique areas of AI innovation across all aspects of AI software, hardware and compute.

These individuals are located in over 115 countries and work predominantly in the private sector at over 50,000 organisations, where they drive innovation in AI.

They are of particular value in the market because of their advanced skills and ability to push the boundaries of science and engineering, creating new products and intellectual property (IP) for their employers rather than just applying existing technology in the market.

Demand for this Top AI Talent is dynamic, with the best minds in high demand and constantly changing roles. They are incentivised to work on complex challenges that will have the greatest impact. Where they choose to work is a leading indicator of where innovation in AI is heading and who is leading it.

Zeki has drawn on 30,000 sources of open-access data to plot each individual's levels of performance and teamwork, career path, influence, reputation and evolving skills. These data points, many unique to Zeki, contribute to Zeki's proprietary scoring system, enabling Zeki to identify and track the very best minds in AI.



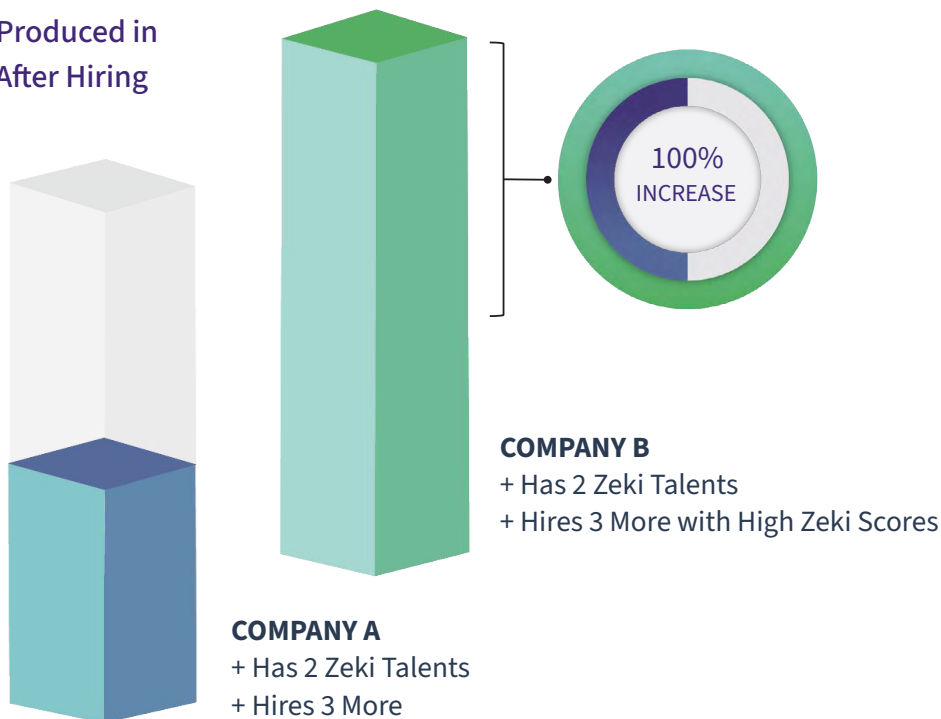
Measurable ROI with Zeki Data

Companies that hire high-scoring Talent succeed faster

Our scoring system is also proven to track innovation trends and future potential. Regression modelling of this dataset confirms that companies that attract individuals with high Zeki scores innovate faster within months.

Achieve 100% increase in innovation when you hire Zeki Talent.

Patents Produced in Months After Hiring



This analysis spans 11 years and covers 600 companies that have undergone at least three rounds of funding. These companies, located across the US and Europe, represent 16 deep-tech industries. The analysis is based on a fixed effect linear regression model, which allows us to control for various factors.

Zeki Data Products

Use data-backed insights to prioritise which hiring or investment opportunities will drive true impact and growth. Also, see [here](#) for a list of Zeki's current datasets available for direct purchase.

TALENT RADAR

Identify and evaluate individual R&D innovation potential.



Utilise Zeki's scoring system to source and rank candidates with a data-driven, objective approach.



Pinpoint and track top candidates using tailored search criteria.



Expand your searches to include a wider and more diverse Talent pool, ensuring a broader range of qualified candidates.



Gain a full understanding of the global deep-tech Talent landscape.

TALENT ATLAS

Access a comprehensive country-level analysis of Top AI Talent globally.



Monitor the movement of AI Talent across regions, industries and organisations.



Spot new AI innovation and expertise centres.



Evaluate and benchmark countries' AI landscapes to stay competitive.



Identify key AI Talent hubs and major employers.



Stay ahead of shifts in AI Talent and industry dynamics.

TALENT IQ

Track and evaluate company innovation through the lens of R&D Talent.



Assess expertise within companies to support smarter investment decisions.



Compare and benchmark companies using advanced human capital data.



Forecast a company's potential for innovation with precision.

TALENT MULTIPLIER

Identify and evaluate the women shaping AI's next chapter.



Discover women excelling across every sphere of AI.



Pinpoint women leading AI from regions often overlooked, spanning diverse geographies and cultures.



Build pipelines of visionary women to enhance your organisation's perspective and innovation results.

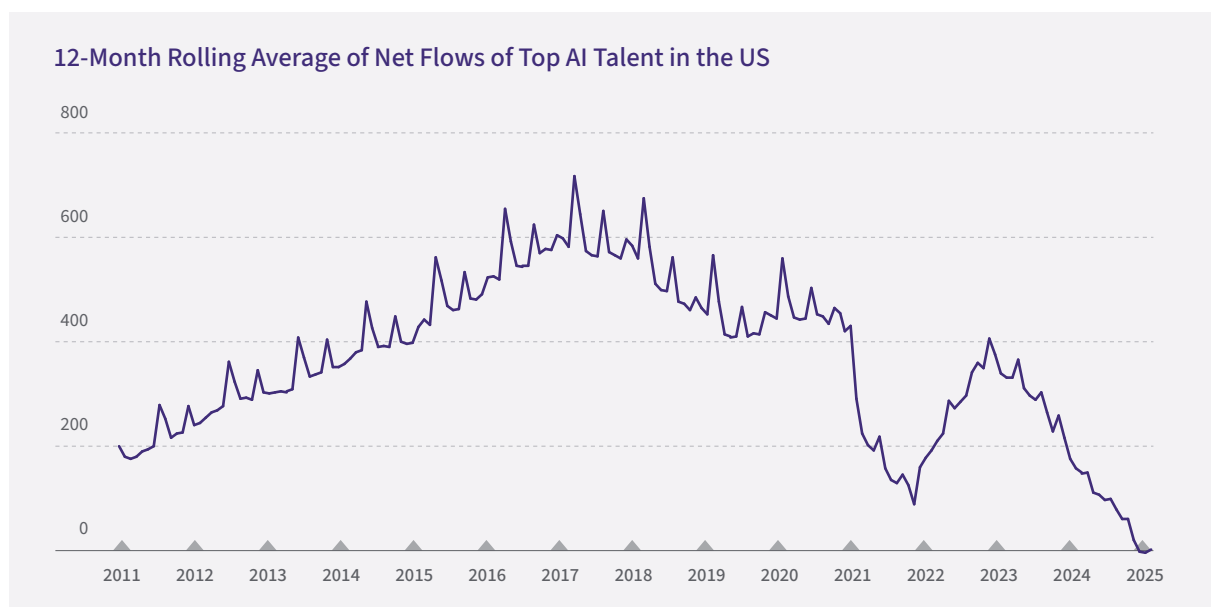
Zeki Prediction One

The US Will No Longer Be the Destination of Choice of Top AI Talent in 2025

The consensus has long been that US dominance in AI is a given because of the unparalleled strength of the US AI ecosystem matching Talent to compute and capital at a scale and efficiency other countries cannot match.

What's often overlooked in this consensus view is that the very best minds in the field are highly mobile and in great demand. They have the power to choose where they work, and an increasing number are deciding that the US is no longer their default destination. This shift could have long-term consequences for innovation and the US economy.

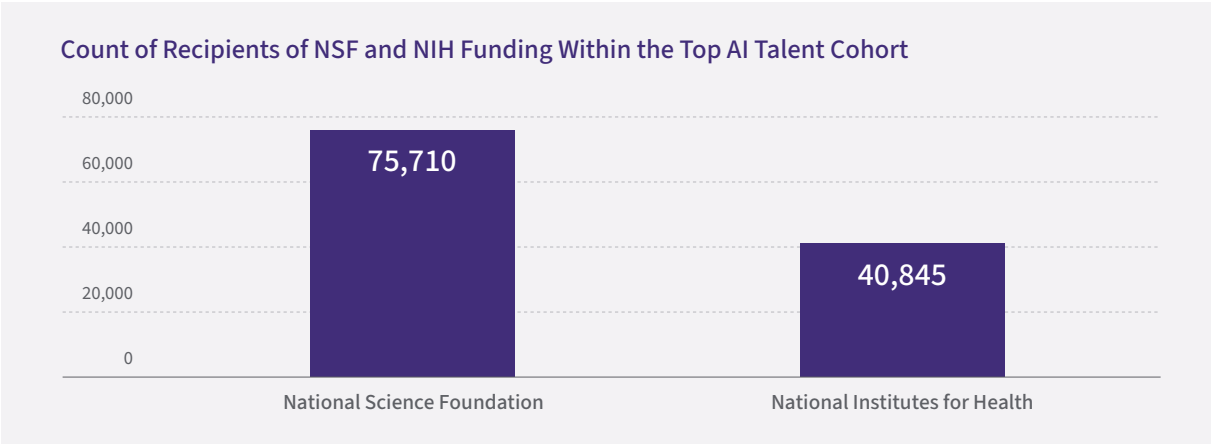
Historically a magnet for Top AI Talent, the US is poised to lose its advantage in 2025. A combination of cuts in federal science funding, reduced hiring by major corporations and a pivot towards homegrown 'sovereign AI' is contributing to the decline of Top AI Talent moving to the US.



Underlying data analysis for this insight is from Zeki's data tool [Talent IQ](#).

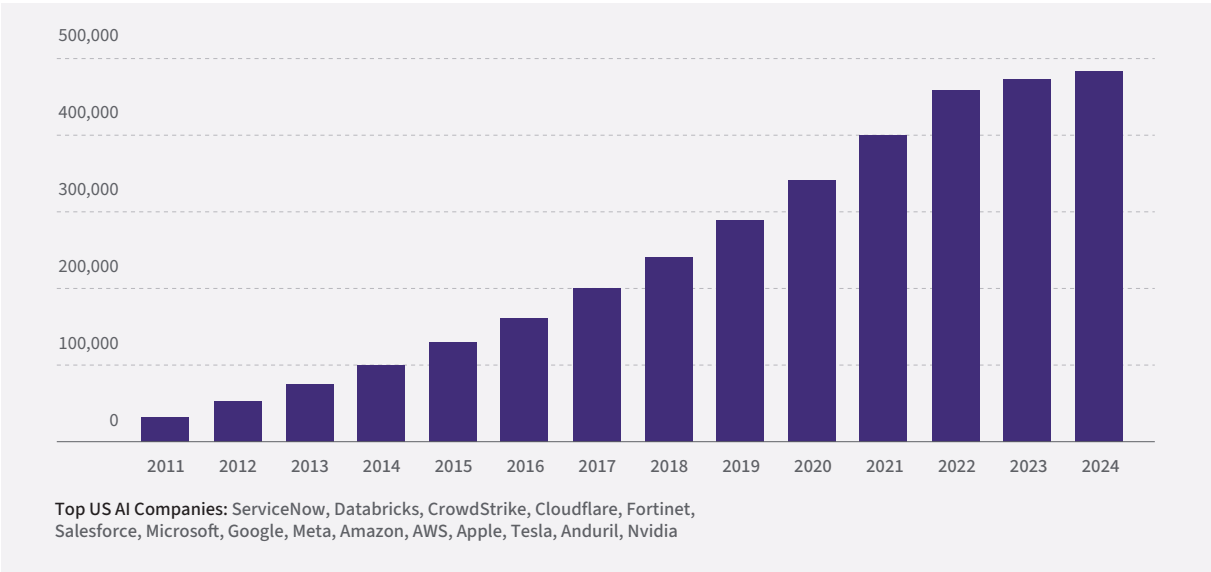
The US has relied heavily on attracting and retaining overseas Talent to maintain its AI advantage. Of the 322,000 Top AI Talent in our data, currently in the US, 40 per cent originated from other countries. Additionally, of the 5,023 Top AI Talent who are founders of companies in the US, 1,943, or 39 per cent, came to the US from overseas.

In February 2025, the US government announced budget cuts to the National Science Foundation (NSF) and National Institutes of Health (NIH), which are pillars of fundamental research funding in the US. Between 2013 and 2023, the NIH accounted for 44 per cent of AI-related public grants, while the NSF accounted for 28 per cent.



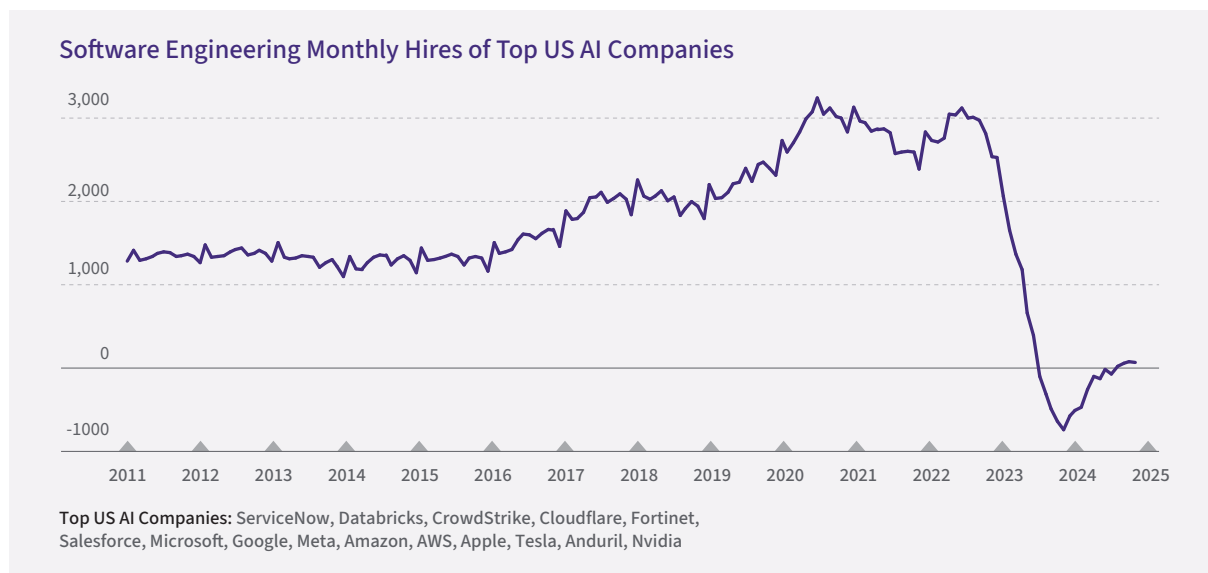
Our data indicates that over 115,000 Top AI Talent have benefited from NSF or NIH funding, allowing them to develop their expertise and make breakthroughs. However, uncertainty about the future of funding is highly likely to disincentivise Top AI researchers from seeking positions in AI labs at US universities, eroding the US’ ability to maintain its global research advantage.

Additionally, the rapid adoption of new agentic AI tools that automate work processes is decreasing the need for large teams of software engineers. Major US companies have hired software engineers in large numbers, relying on Talent from overseas to meet a systemic lack of supply within the US.



Underlying data analysis for this insight is from Zeki’s data tool [Talent Atlas](#).

The 15 Top US AI companies have, over time, hired half a million software engineers at an average annual growth rate of 24 per cent between 2011 and 2024. However, investors are increasingly rewarding those companies that can demonstrate that AI can drive down costs, especially as AI agents gain fast traction in the market.

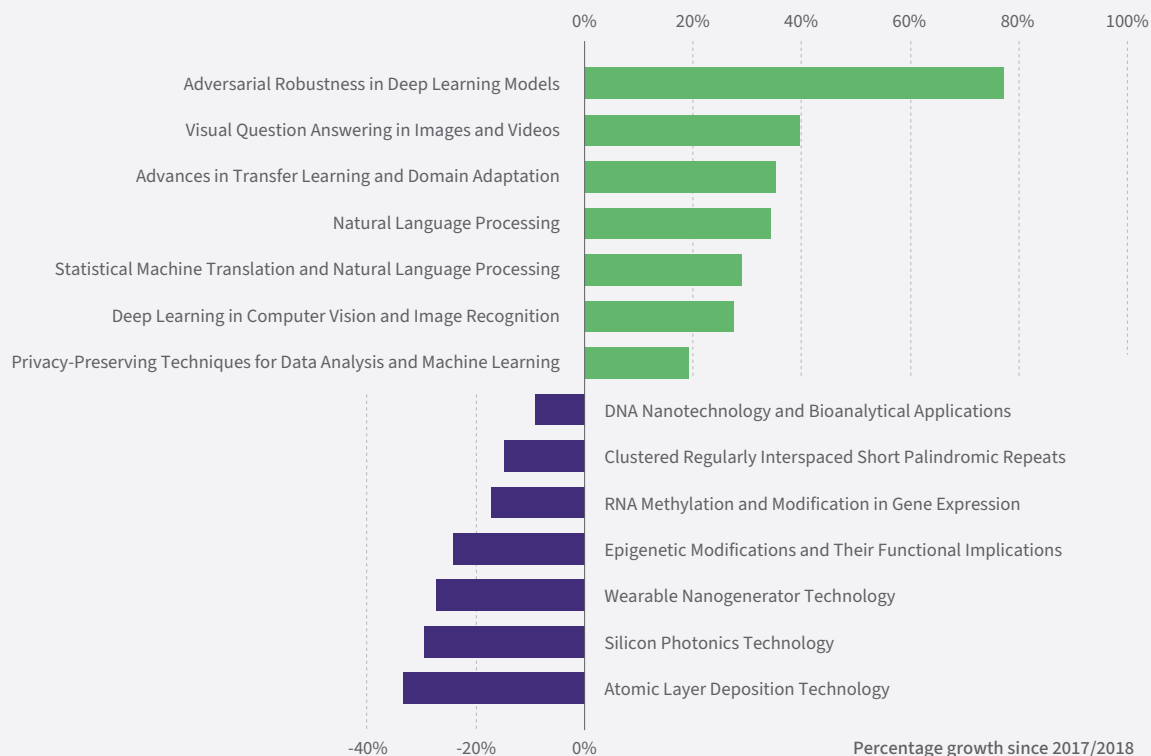


Underlying data analysis for this insight is from Zeki's data tool [Talent IQ](#).

Monthly software engineer hires by these 15 Top US AI companies once exceeded 3,000. Now, that rate has dropped to zero. At a minimum, major US companies will likely hire mid-skilled software engineers in much smaller numbers in 2025. There is also a scenario where they start to reduce overall headcount if AI agents prove that they can replace software engineering skills and not just augment them.

Given the high reliance of the US on overseas Talent to meet all capacity gaps in software engineering, any fall in demand will also likely impact historic inflows of more high-end AI engineering Talent.

Areas of Expertise of Top AI Talent Moving to the US in 2023/2024 Compared to Those of Who Moved in 2017/2018



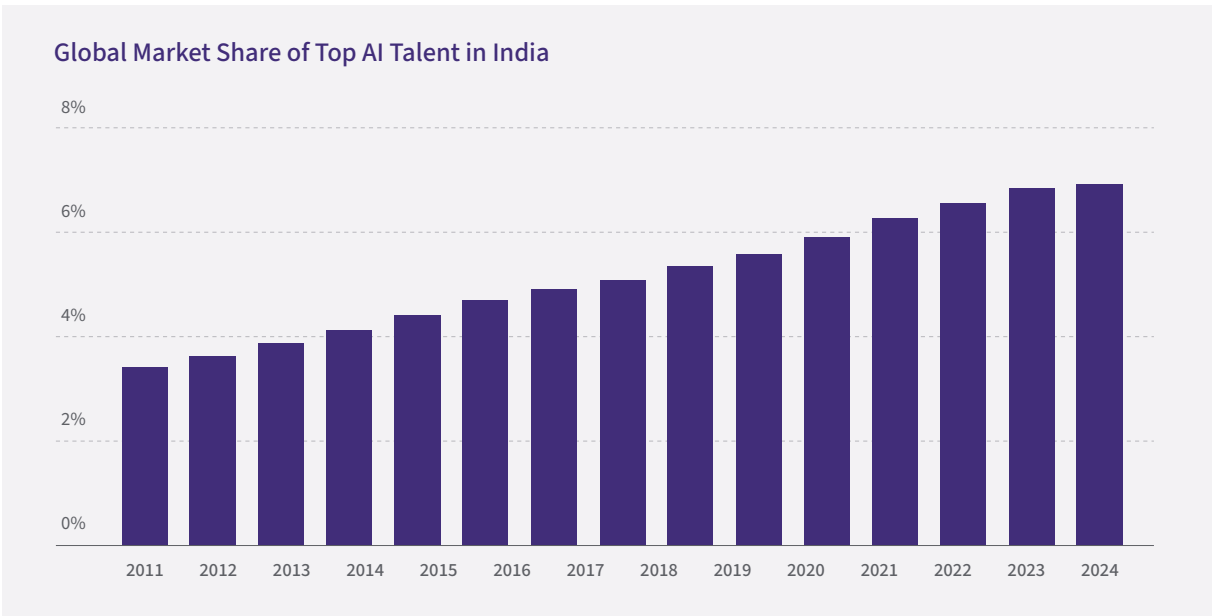
Our data reveals a stark difference in expertise areas among individuals moving to the US between 2017–2018 and 2023–2024—two periods chosen as representative of normal hiring patterns unaffected by the COVID-19 pandemic. Notably, there has been an inflow of Talent with core AI skills that are essential for developing foundational AI models. Conversely, there has been a substantial relative decline in demand for overseas expertise in fields such as silicon photonics and atomic layer deposition technology—key areas valued by the semiconductor and defence sectors.

This narrowing focus affects only highly specialised areas and will have less impact on overall flows at a national level. It will, however, be a factor of concern to major semiconductor companies as they deliver on their commitments to locate more facilities in the US and find themselves competing for a more finite pool of Talent.

Zeki Prediction Two

India Will Become a Consumer, Not a Provider, of Top AI Talent in 2025

India has doubled its global market share of Top AI Talent in the last decade.

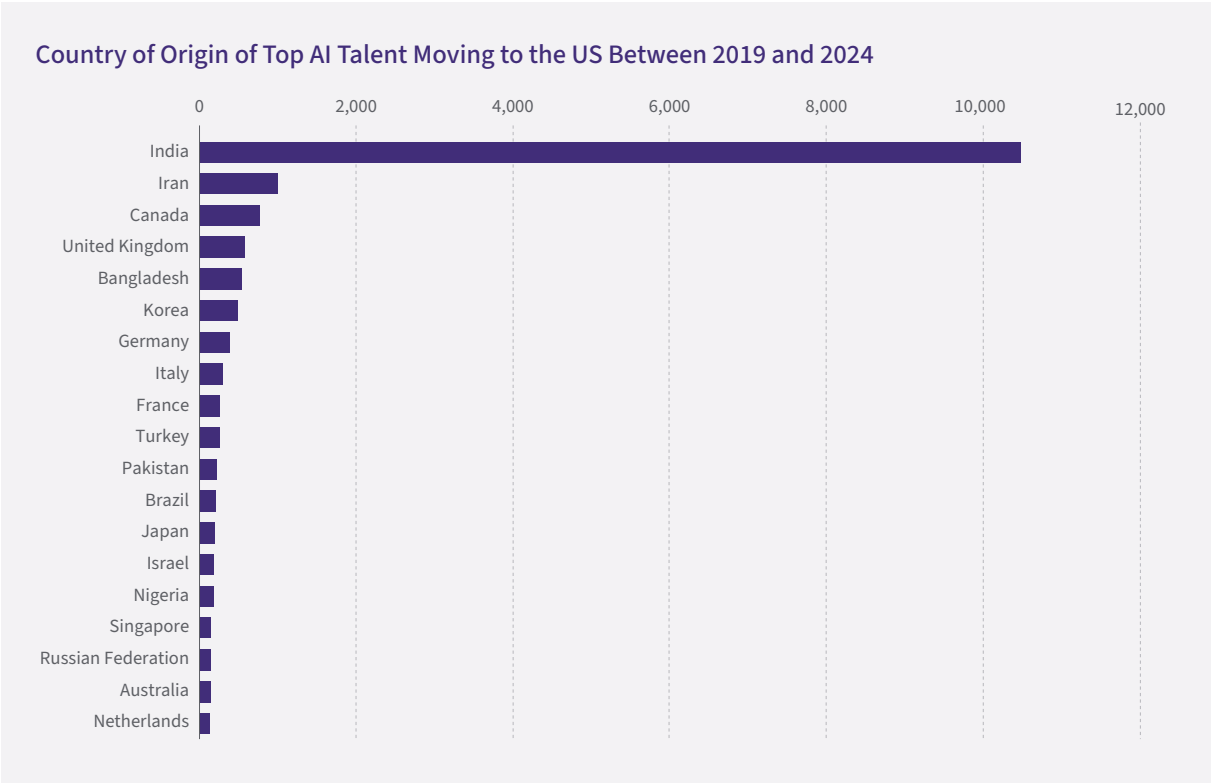


Underlying data analysis for this insight is from Zeki’s data tool [Talent Atlas](#).

The inflection point for India occurred in 2015 when six new Institutes of Technology were established alongside the rapid expansion of existing institutions. India’s capacity to train Top AI Talent at scale is crucial in the global Top AI Talent market.

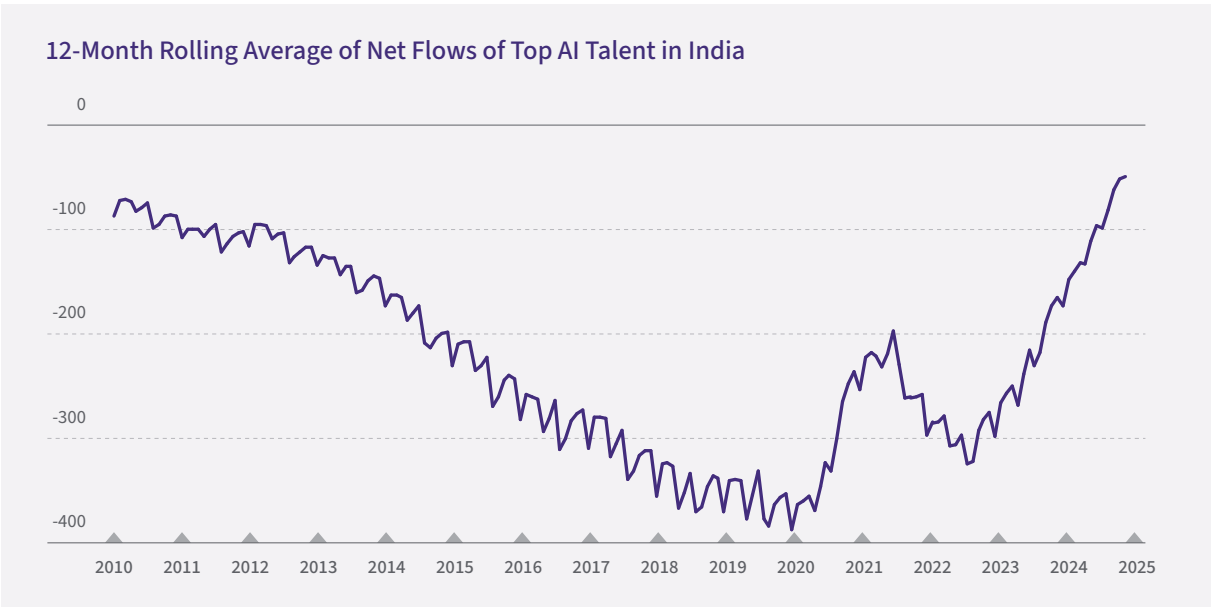
Indian-trained professionals are highly mobile and valued by US companies, particularly as these companies seek to address capacity gaps in the US for advanced AI skills. As a result, 44 per cent of Top AI Talent initially educated in India now reside outside the country.

The US has been the primary beneficiary of this trend. Over the last five years, more than 10,000 Top AI Talent have moved to the US after completing their first degree in India, far exceeding the numbers from any other country.



Underlying data analysis for this insight is from Zeki's data tool [Talent Atlas](#).

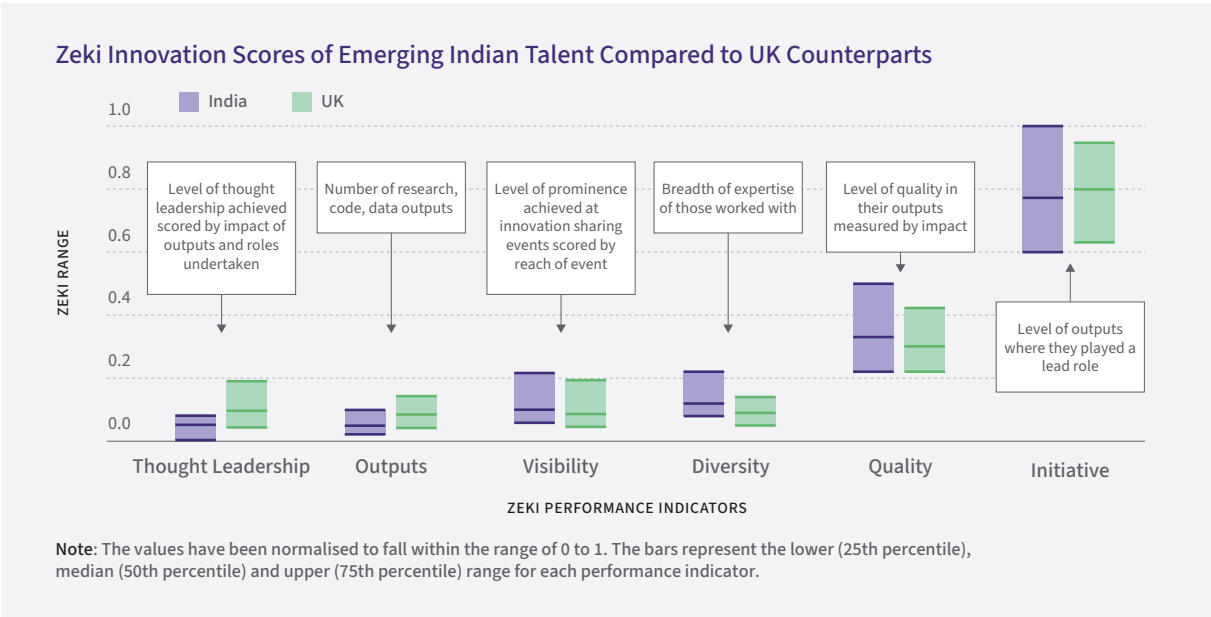
However, this dynamic is changing rapidly as incentives to move to the US are reduced. This is causing a rapid fall in outflows of Top AI Talent from India.



Underlying data analysis for this insight is from Zeki's data tool [Talent Atlas](#).

Our data shows no evidence that Indian AI Talent already abroad is planning to return to India in large numbers. Instead, it appears that new emerging AI Talent is opting to pursue their careers or complete their advanced degrees within India.

Supporting this trend, the Indian government took significant action in March 2024 by launching its AI Mission, which aims to develop over 10,000 graphic processing units (GPUs) through public-private partnerships. This initiative is designed to bolster homegrown AI models and deep-tech startups.



Underlying data analysis for this insight is from Zeki’s Foundational AI dataset.

India’s Top AI Research Talent is often perceived as lacking in quality despite publication rates comparable to those of the US. Currently, India produces the same proportion of AI research publications as the US (9.2 per cent of all publications), but the quality, as measured by citation rates, is lower. However, we predict that this trend is set to change.

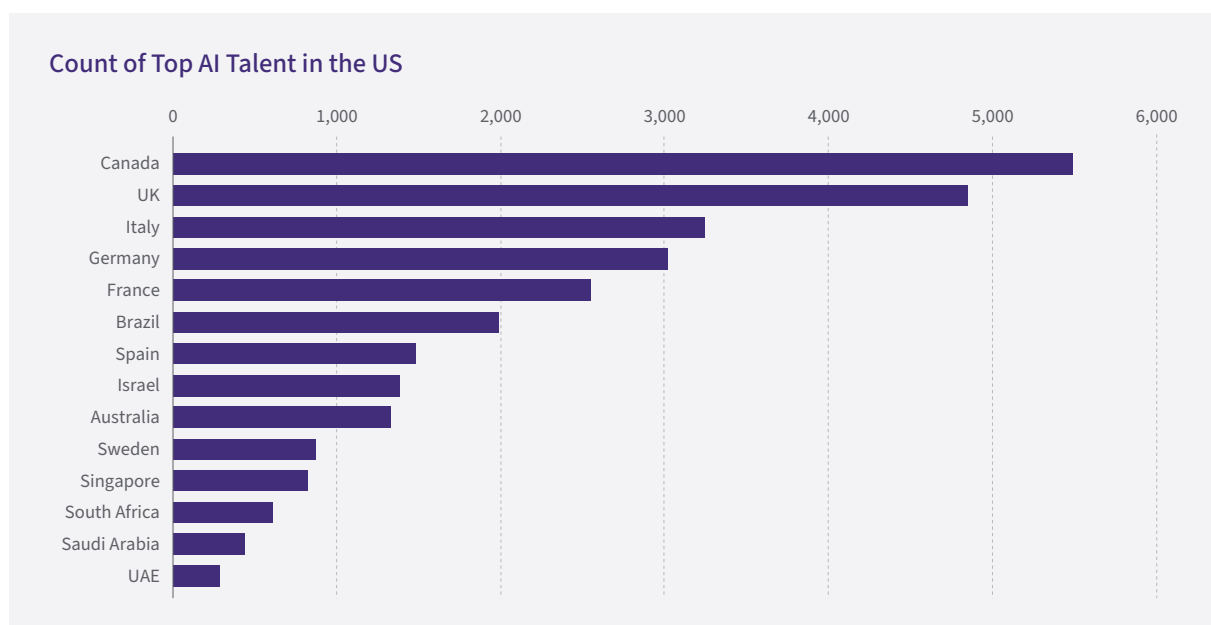
As the Indian AI ecosystem continues to expand, with greater access to computing resources, we expect that this next wave of Indian Top AI Talent will increasingly opt for opportunities within India instead of pursuing positions abroad.

Consequently, India will become more of a consumer of its own educated and trained Top AI Talent rather than a supplier, particularly to the US. This trend will reshape the global market for Top AI Talent which has historically relied on Indian Talent to meet capacity gaps around the world. An increasing concentration of Top AI Talent in India will accelerate home-grown innovation, creating new companies and new investment opportunities in India.

Zeki Prediction Three

Major AI Players in Europe and the Gulf States Will Redouble Efforts to Retain Their Supply of Top AI Talent

As major economies reinvent their supply chains in the light of tariffs, Talent will be no exception. Governments will redouble efforts to retain the Top AI Talent they have educated and trained. They have long regretted their inability to compete with the US in this field but now see a once-in-a-generation opportunity to reverse this trend.

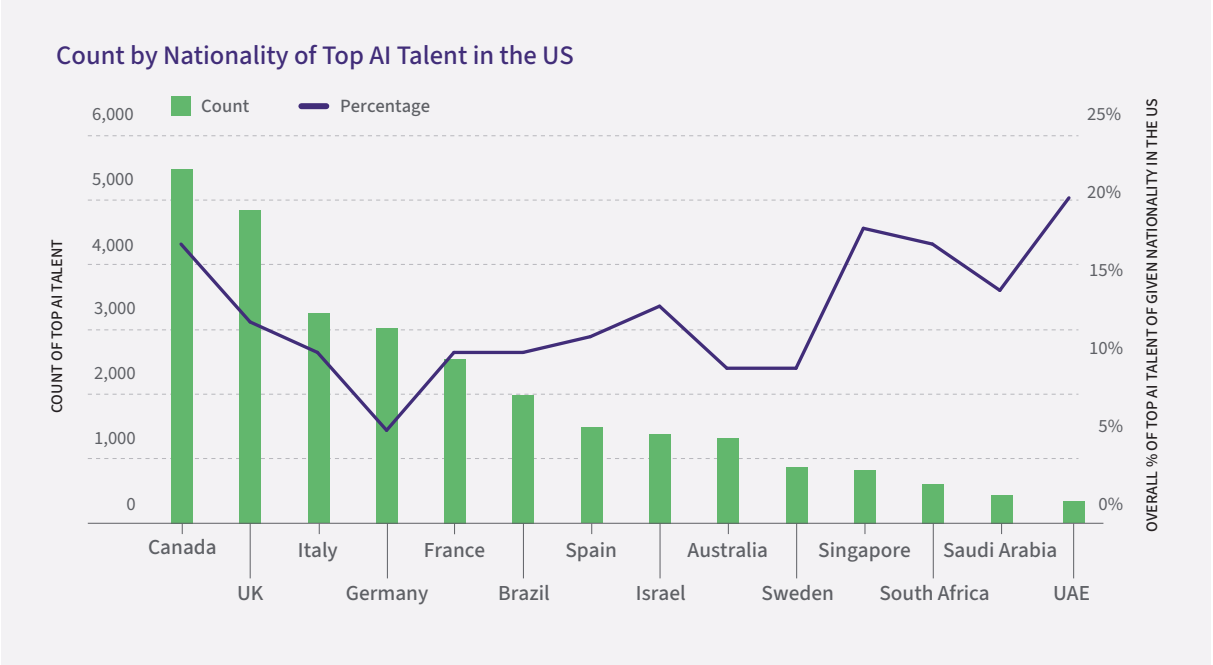


Underlying data analysis for this insight is from Zeki's data tool [Talent Atlas](#).

In April 2024, the Canadian government announced a \$2.4 billion package to secure Canada's AI advantage. Meanwhile, back in February 2024, the Singaporean government unveiled a \$1 billion plan, spread over five years, to support AI computation, Talent development and industry growth. The UAE and Saudi Arabia have also made significant investments in AI, with Abu Dhabi's MGX Fund targeting the management of \$100 billion in AI assets.

Most recently, in January 2025, the UK government announced plans to establish an internal headhunting team modelled after Top recruitment companies to recruit elite AI scientists and engineers to the UK. Additionally, the government proposed a dedicated global AI Talent visa to help reduce barriers for top researchers and engineers.

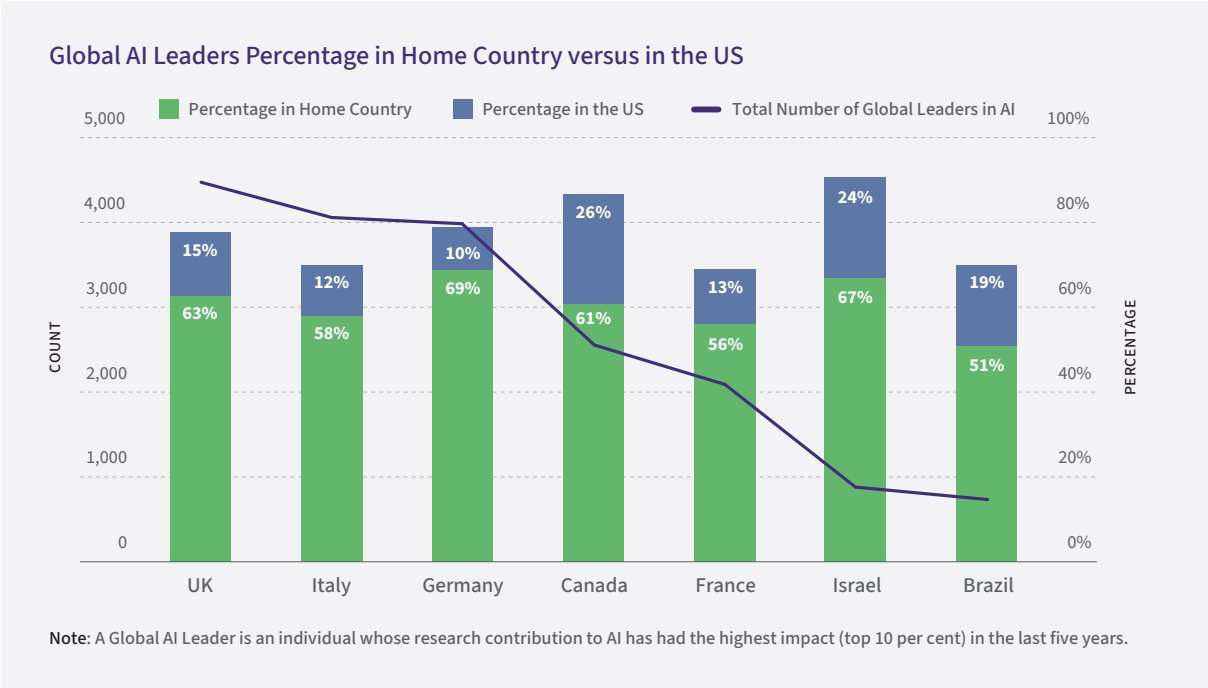
Canada and the UK are best positioned to attract back their Talent, given the high numbers of their nationals in the US.



Underlying data analysis for this insight is from Zeki's [Foundational AI dataset](#).

However, other countries with strong AI ecosystems could benefit even more from drawing back their Talent, given that a higher percentage of their overall Talent pool has relocated to the US. This is particularly relevant for UAE and Saudi Arabia, who have the infrastructure and energy supply to rapidly advance their AI ambitions if they can quickly build the quorum of Top AI Talent necessary to make this a reality.

The UK, Italy and Germany, in particular, now also have the opportunity to entice back their global AI leaders, individuals who have had the highest impact in the last five years and have the potential to have the most disproportionate impact within their AI innovation ecosystems. 10–15 per cent of the brightest minds, trained by the UK, Italy and Germany, are now in the US.



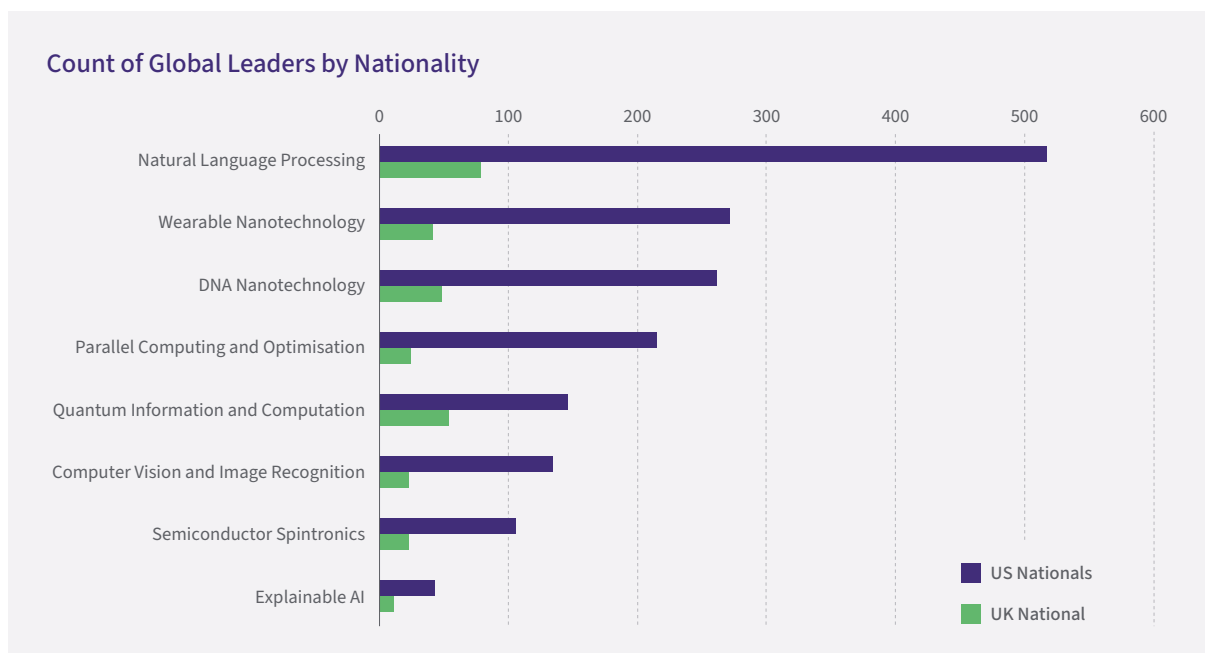
Underlying data analysis for this insight is from Zeki's [Foundational AI dataset](#).

An inflow of quality as well as quantity will be critical if other major economies are going to narrow the innovation gap with the US, which has accumulated over time.

Countries will best succeed if they take a targeted long-term approach and don't seek to catch the existing AI innovation wave but look to the next. The UK, for example, has been unable to compete with the US in training Top Global Leaders in disciplines like Natural Language Processing (NLP), which is a core expertise in developing LLMs.

Instead of competing here, it would be more beneficial to concentrate on developing new emerging skills that are likely to drive the next wave of AI innovation. This includes exploring the intersection of quantum computing and AI, as well as advancements in computer vision, imaging, robotics and sensing. These disciplines will support the creation of World Models that are not only trained on internet data like LLMs but also on understanding and interacting with the physical world.

In these more emerging areas, the UK and other major European economies are likely to have the potential to close the innovation gap more quickly.



Underlying data analysis for this insight is from Zeki's [Foundational AI dataset](#).

Zeki Prediction Four

Google's Talent Concentration Will Set the Stage for LLM Dominance

Predictions about who will win the race to produce the next generation of GenAI LLMs have primarily centred on companies with access to substantial computing power and the most advanced AI chips.

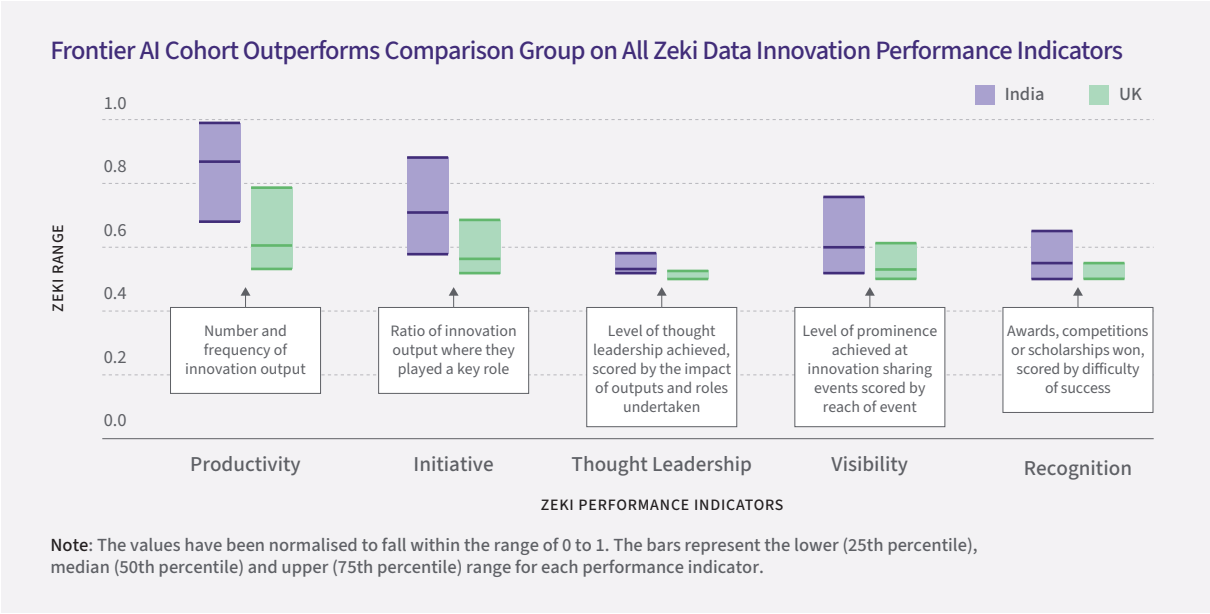
However, DeepSeek's release of its R1 LLM model in January 2025 challenged this assumption. It demonstrated that groundbreaking AI advancements can be achieved at a fraction of the typical computing cost and without the latest AI chips, provided there is enough Talent involved.

Even companies with the greatest access to computing resources and cutting-edge AI chips are uncertain about their ability to develop systems that can meet increasingly demanding benchmarks without the Talent adept at finding innovative solutions. Researchers and engineers with direct experience in creating advanced models will continue to be in high demand, as they are a limited resource. Zeki has identified 3,600 individuals who have played a direct role in developing the most significant LLMs, as defined by Epoch AI. For now, these individuals are seen as the elite within the AI community.

[Learn more about how Zeki's data unveiled DeepSeek's hiring trend to challenge the US' AI dominance.](#)

The visual below shows the ranges of Zeki scores for the Frontier AI cohort against a comparison group of 30,000 individuals working in the same areas of expertise globally (outside China). We used data from over 11 years to track their progress against these scores.

The Frontier AI cohort scores above the comparison group on all scores, showing their consistency of productivity in delivering research and other outputs, their level of initiative and leadership in AI projects, their thought leadership influence in the AI community as well as their international visibility and levels of recognition and esteem amongst their peers.

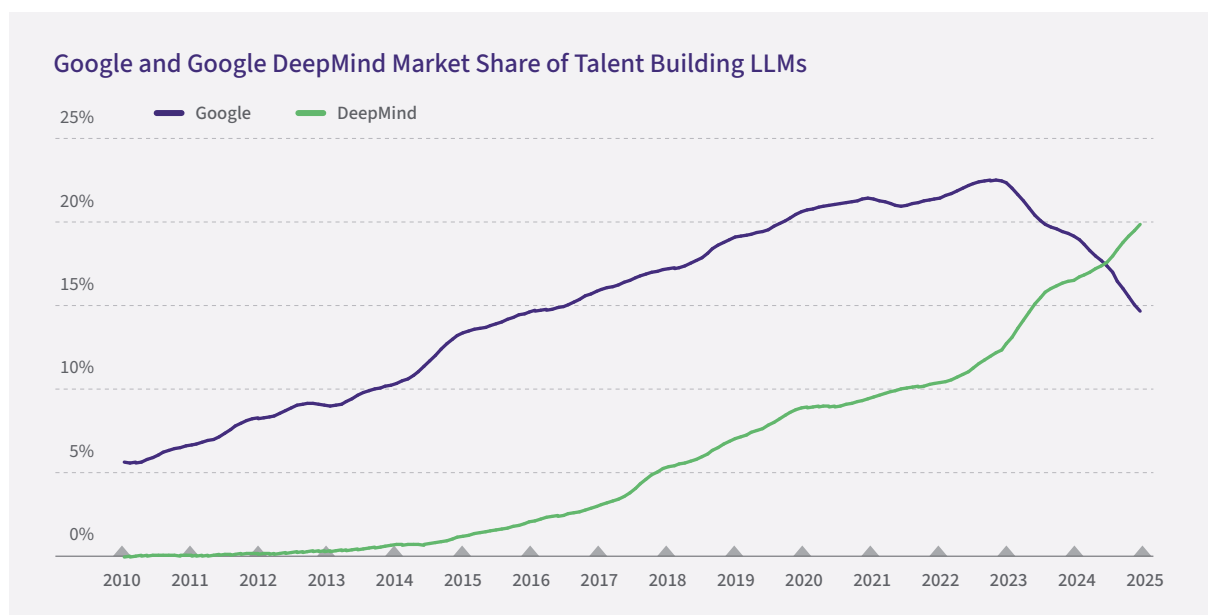


Underlying data analysis for this insight is from Zeki's [Foundational AI dataset](#).

Our regression analysis of the data indicates a strong historical correlation between the speed of new model releases by companies and the ability of a company to capture market share of this limited Talent.

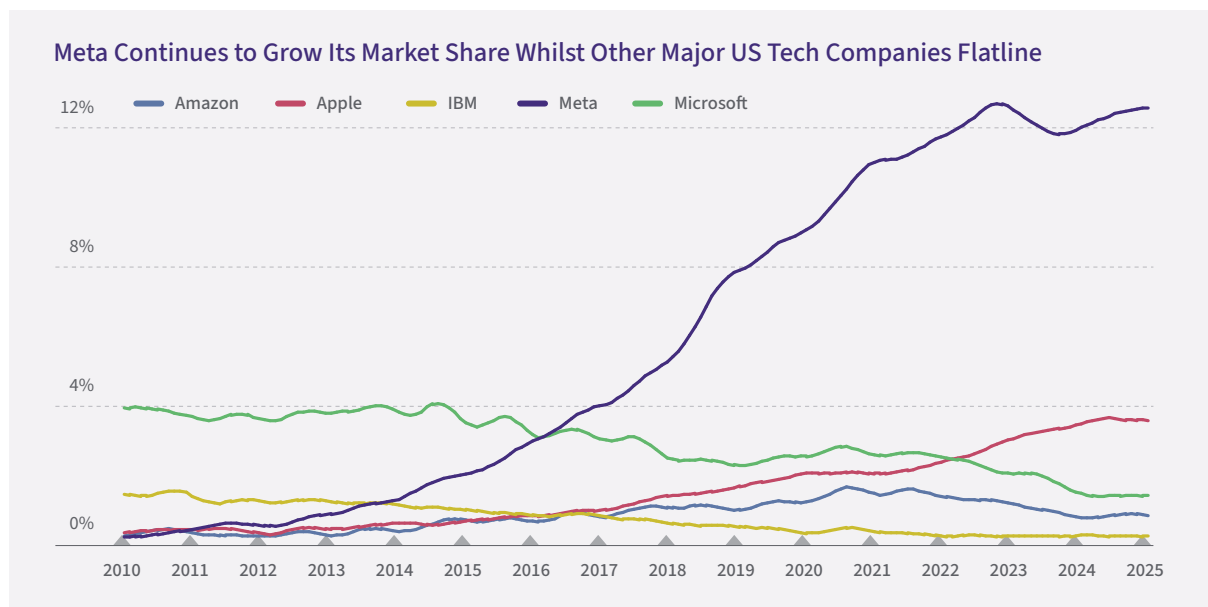
According to this analysis, Google and Google DeepMind are best positioned to win the race to develop the next wave of technology underpinning LLMs, as they have now secured a 35 per cent market share of this Talent. The visual below illustrates the increasing transfer of expertise from Google to Google DeepMind, as they concentrate forces to make the next technical breakthroughs.

Over the past decade, Google has launched 187 new models, including seven in 2024, a relatively small number compared to previous years, underlining the increasing complexity and resources needed to make improvements to existing models.

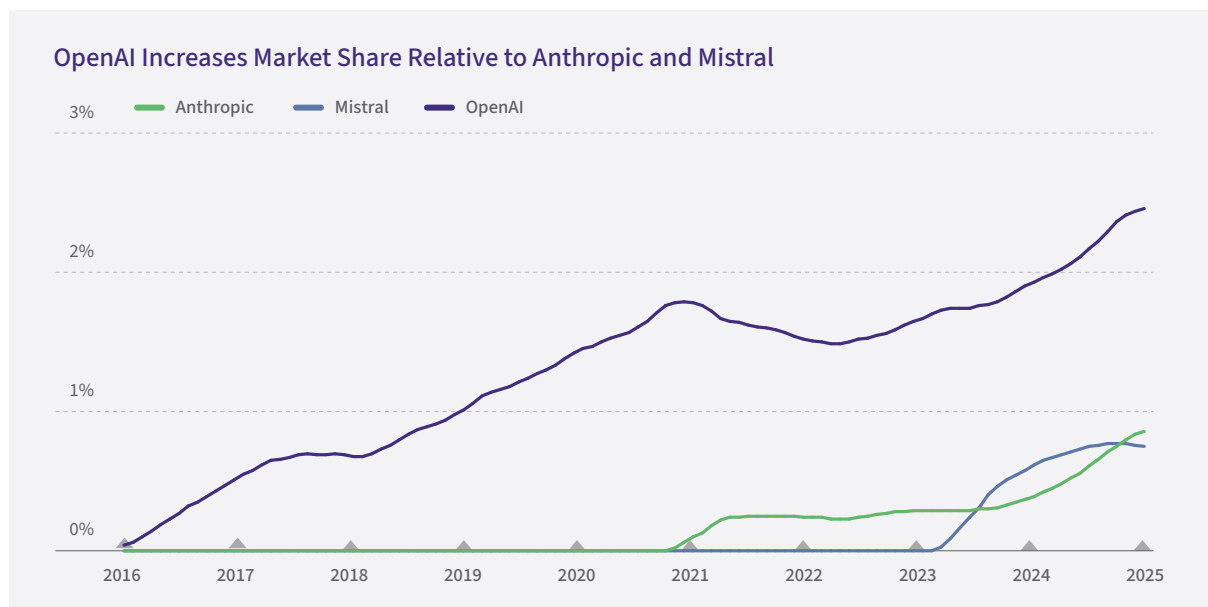


Underlying data analysis for this insight is from Zeki's [Frontier AI dataset](#).

Meta and OpenAI continue to increase their market share, but they have not surpassed Google. In the past 10 years, Meta has produced 82 models, while OpenAI has released 36. They are, however, far surpassing Mistral and Anthropic, which struggle to attain meaningful market share.



Underlying data analysis for this insight is from Zeki's [Foundational AI dataset](#).



Underlying data analysis for this insight is from Zeki's [Frontier AI dataset](#).

Based on this analysis, we predict that Google and Google DeepMind will lead in new model generation due to Google's unmatched computing power and infrastructure. While other companies may introduce new and potentially superior products, they are likely to struggle to advance the underlying technology of their models as quickly as Google and Google DeepMind will.

Zeki Prediction Five

London Will Be the New Epicenter for Responsible Technology

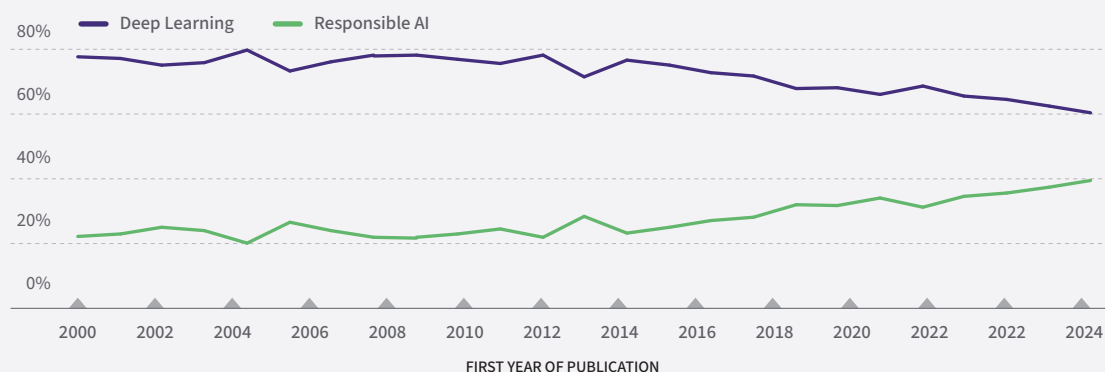
As AI becomes more integrated into all aspects of life, the focus on responsible development and deployment will grow. This will be driven not only by governments looking to regulate AI but also by businesses and consumers who are increasingly concerned about its impact.

London is poised to strengthen its position as the leading centre for excellence in responsible AI. A significant factor contributing to this is the presence of Google DeepMind in the city, which boasts the highest concentration of thought leaders in responsible AI among large organisations. Additionally, the AI Security Institute serves as a key centre of gravity for Talent in this field.

This concentration of thought leadership in the UK is increasingly advantageous as Top AI Talent is more focused on responsible AI and attracted to ecosystems that prioritise it.

Within our data, we identified over 17,000 individuals at more than 5,000 organisations who have either contributed research in specific responsible AI fields such as privacy, bias, fairness, ethics, explainability and transparency, actively tracked more than 200 responsible AI innovation workshops in the last 10 years or have taken on positions in companies with an explicit responsible AI mandate.

Relative Size of Deep Learning and Responsible AI Talent Pools Located in Europe and North America



Responsible AI Is Attracting Talent

■ Responsible AI is an increasingly attractive area of research, reflecting the growing importance of ethics, robustness and explainability in AI research and applications.

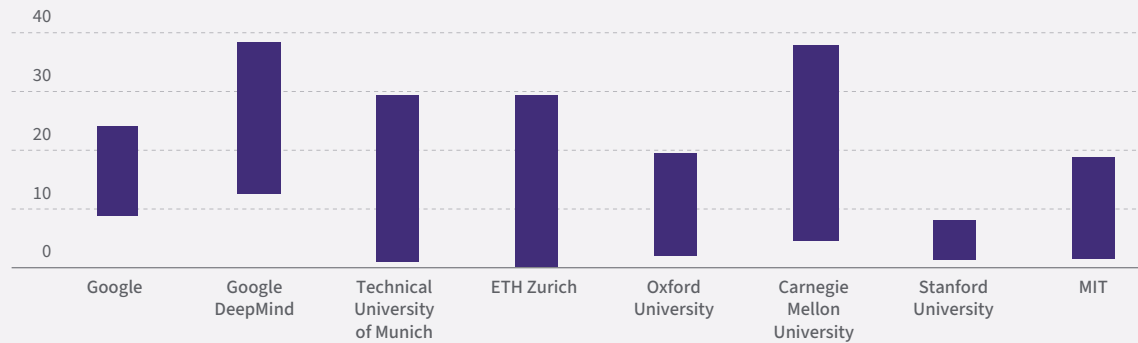
■ When combined into one Talent pool of individuals who have published research in the main deep learning and responsible AI fields, an increasing percentage are working in responsible AI.

Underlying data analysis for this insight is from Zeki's [Responsible AI dataset](#).

Top Thought Leaders in Responsible AI Attract Talent to Their Organisations

- Companies increasingly sponsor responsible AI conferences or workshops to attract Talent. However, demonstrating thought leadership in the field is as effective.
- The universities and companies with the highest scoring thought leaders in responsible AI have succeeded in attracting the greatest numbers of responsible AI Talent.

Zeki Responsible AI Global Thought Leadership Score Ranges for 10 Highest Scorers in Each Organisation



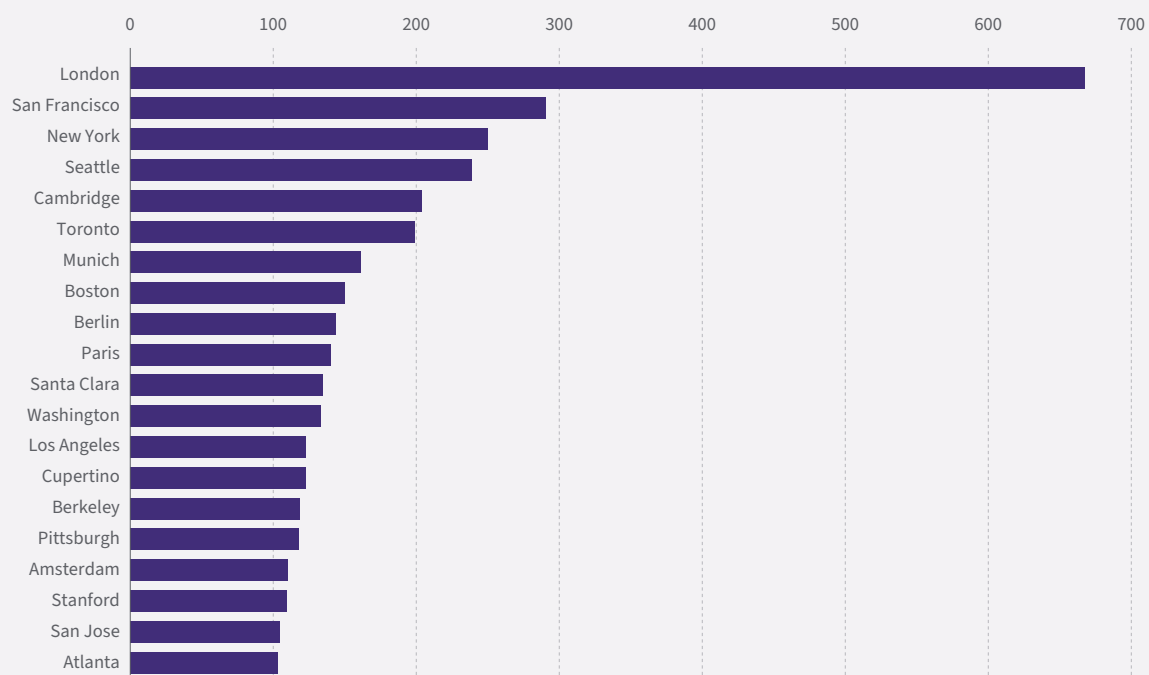
The Zeki Thought Leadership score measures how often an individual has been selected by their peers to take on leading roles at major AI events or workshops weighted by prestige of the event (roles include organiser, speaker, reviewer, moderator and editor).

Underlying data analysis for this insight is from Zeki's [Responsible AI dataset](#).

London Is the Epicenter of Responsible AI

- Responsible AI Talent hubs have emerged in specific cities, concentrated around major universities and companies.
- London has the highest concentration of responsible AI Talent by a factor of two.
- Toronto and New York have emerged as centres of excellence but with Talent working in a diffuse range of organisations located in these cities.

Country of Origin of Top AI Talent Moving to the US Between 2019 and 2024

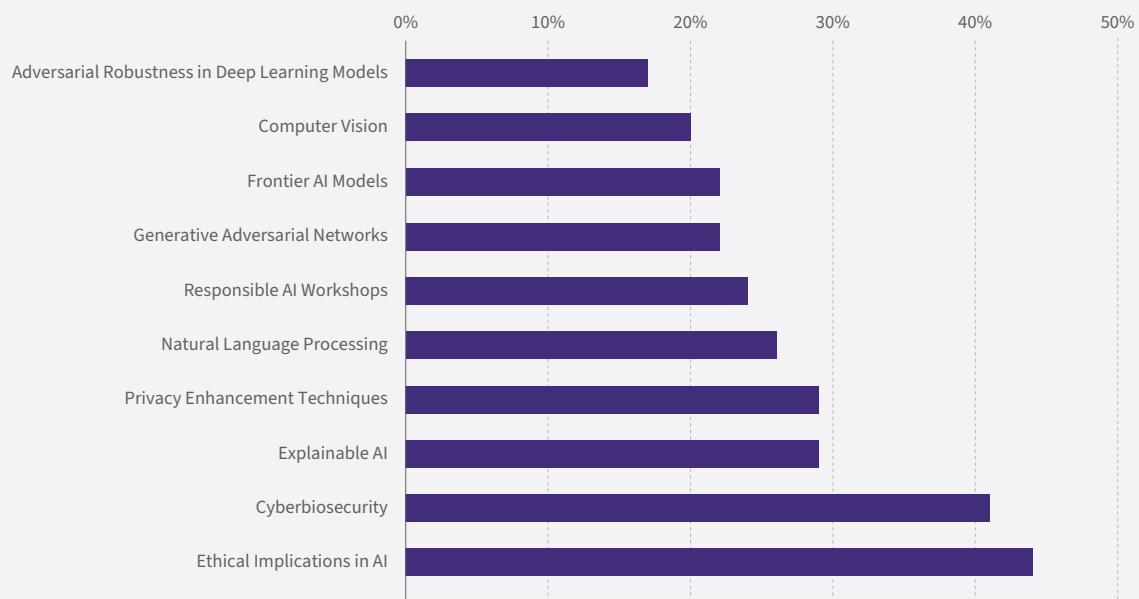


Underlying data analysis for this insight is from Zeki's [Responsible AI dataset](#).

There Is a Sharp Gender Disparity Within Responsible AI Disciplines

- Women represent a notable portion of the many participants from Europe and North America engaging in responsible AI workshops over the last few years.
- There is a sharp gender disparity between the Talent being hired by companies in different AI disciplines overall.
- The largest gender gap pits AI/Ethics against Adversarial Robustness, a difference holding across all academic degree levels.

Percentage of Female Talent by Area of Responsible AI Expertise Who Are Currently Working in European or North American Companies



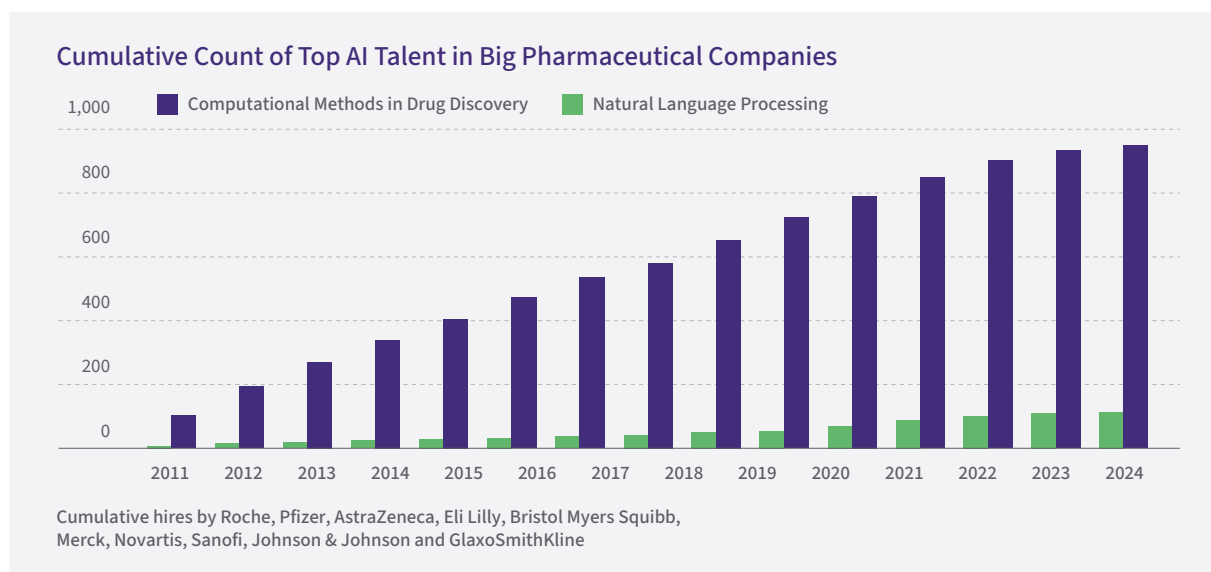
Underlying data analysis for this insight is from Zeki's [Responsible AI dataset](#).

Zeki Prediction Six

Big Pharma Will Play It Safe and Outsource High-Risk, High-Reward AI Drug Discovery

Big Pharma is actively leveraging AI to accelerate and enhance drug discovery processes. Companies, such as GSK and Novartis, have established dedicated AI units. However, their hiring patterns suggest very limited ambition to incur the expense and risk of major in-house investments in teams with the tools and expertise to build their own foundational AI models.

The visual below illustrates that Big Pharma continues to hire Top AI Talent with expertise in computational methods of drug discovery. This established technique has been used for decades and relies on explicit algorithmic rules, typically also requiring substantial expertise in the biomedical domain.



Underlying data analysis for this insight is from Zeki's data tool [Talent IQ](#).

Big Pharma is not directly competing with major AI companies for Talent specialising, for example, in building LLMs from scratch. NLP is a discipline essential for developing LLMs. In 2024, Google hired more NLP experts than the largest 10 pharmaceutical companies did over the past decade.

On the other hand, the related AI fields of deep learning and reinforcement learning present new opportunities for drug discovery. They carry a higher risk but potentially greater rewards compared to traditional drug discovery methods. Their approach also involves significant expense and complexity due to the need for large datasets and high computational power.

Biotech startups are investing in this deep learning and reinforcement learning expertise and increasingly competing with Big Tech for this Talent. Big Pharma is not following suit. As a result, we predict that Big Pharma will continue to form partnerships with Big Tech or pursue acquisitions rather than develop in-house expertise.

Case Study

Different Approaches to AI: Moderna versus BioNTech

Moderna’s Top 10 Areas of R&D Expertise

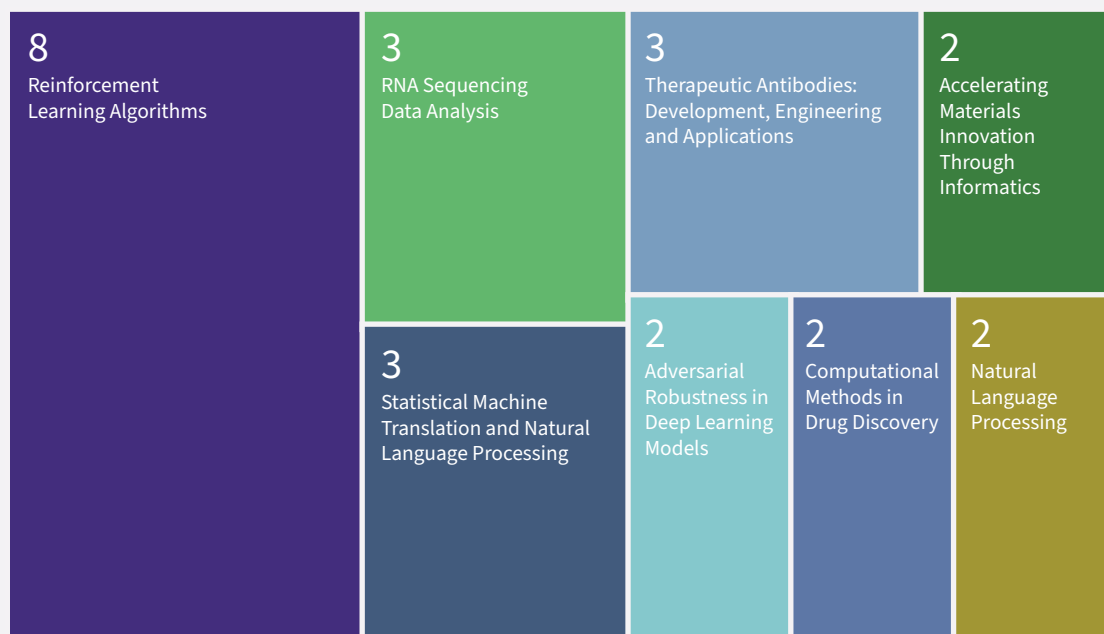
Moderna has announced a partnership with OpenAI and has also launched several internal AI initiatives. Moderna has not hired a significant number of researchers with proven advanced skills in working at the frontier of AI innovation, focusing instead on core mRNA expertise.



Underlying data analysis for this insight is from Zeki’s data tool [Talent IQ](#).

InstaDeep's (Acquired by BioNTech) Top 8 Areas of R&D Expertise

InstaDeep's proven expertise in reinforcement learning is very rare amongst companies in the biotech sector, with only Google-affiliated biotech teams investing systematically in this expertise, like Isomorphic Labs.



Underlying data analysis for this insight is from Zeki's data tool [Talent IQ](#).

BioNTech's Top 10 Areas of R&D Expertise

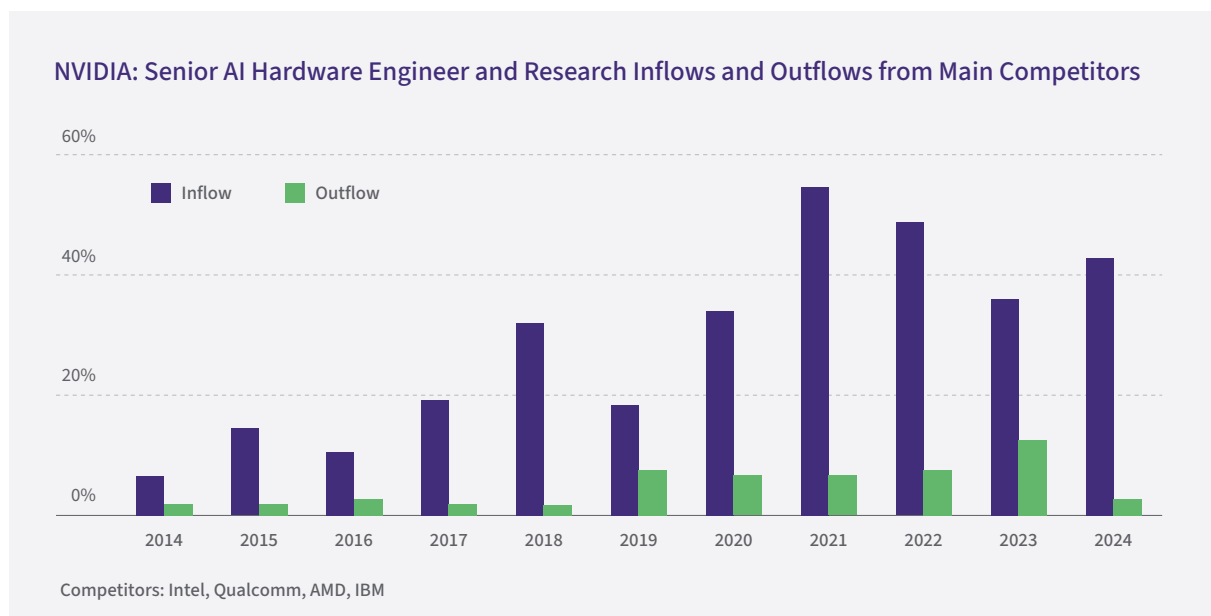
BioNTech did not have this level of deep AI expertise, with its R&D focus on optimising its core mRNA platform technology. The acquisition of InstaDeep means it can now take a higher risk/reward approach using more technically complex drug discovery techniques, drawing on its closer access to InstaDeep's RL expertise.



Zeki Prediction Seven

Nvidia's Talent Magnetism Will Reinforce Its Innovation Leadership

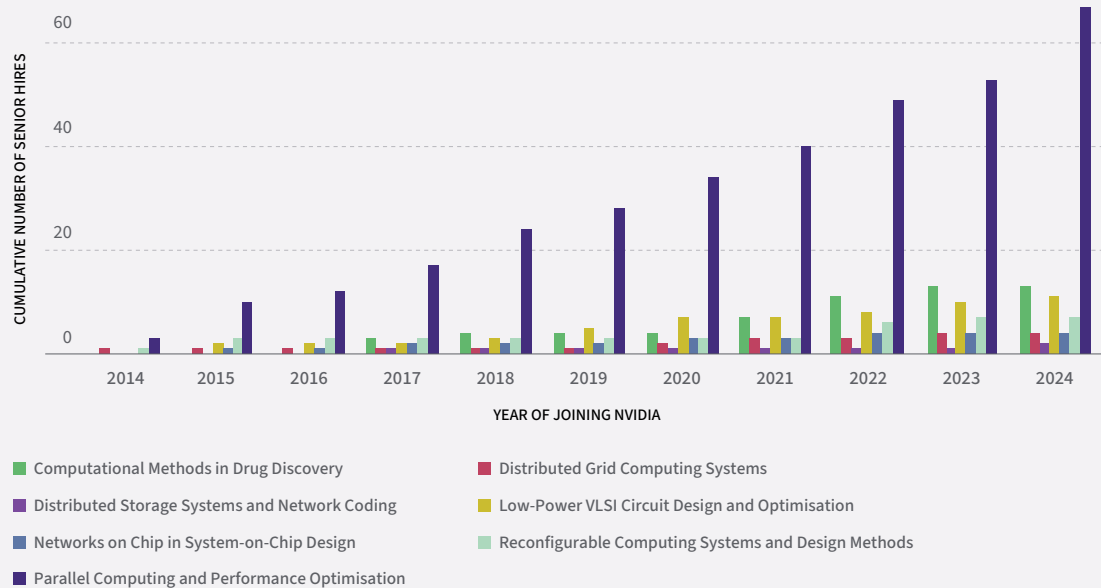
Market analysts predict that Nvidia will gradually lose its position as the leading producer of advanced AI chips. However, this trend is not evident in the decisions made by industry insiders, AI hardware engineers and researchers in senior or leadership positions at Nvidia's competitors. Each year, many individuals from these roles continue to join Nvidia, while only a few are moving to its main rivals.



Underlying data analysis for this insight is from Zeki's data tool [Talent IQ](#).

As long as the current dynamics remain unchanged and insiders in the AI chip sector continue supporting Nvidia, we anticipate the company will retain its leading position. The breadth of Nvidia's active recruitment of senior experts from its competitors emphasises that it is not only improving its AI chips but also developing a comprehensive ecosystem that rivals will find challenging to compete with.

Areas of Expertise of Nvidia's Senior Hires from Competitors



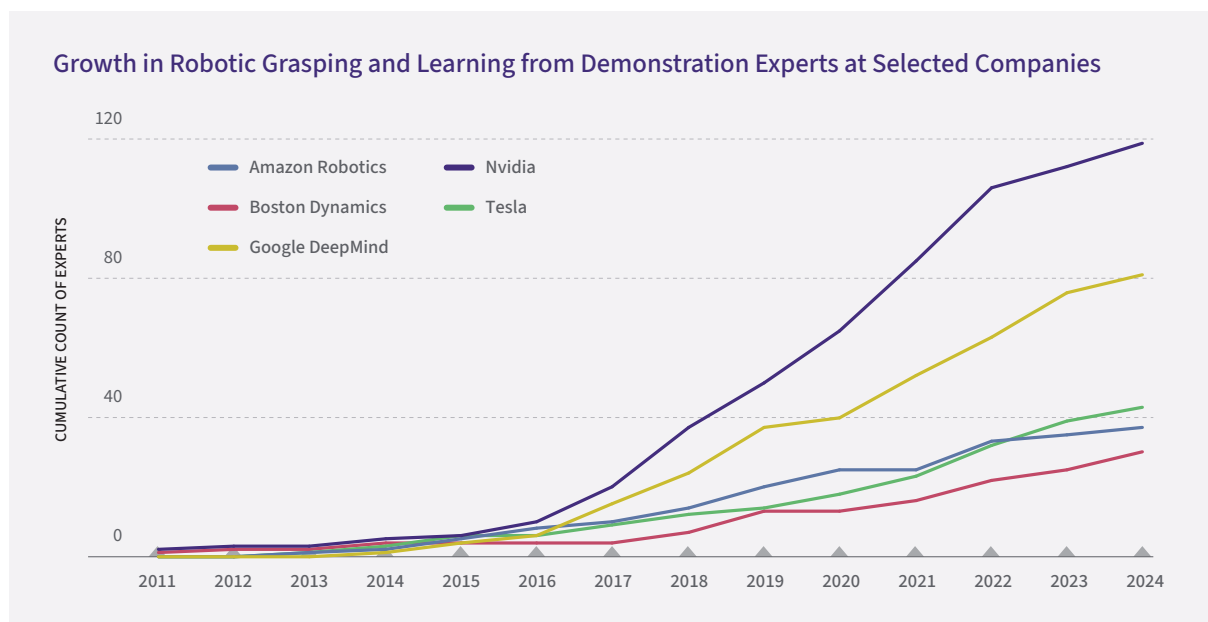
Competitors: Intel, Qualcomm, AMD, IBM

Underlying data analysis for this insight is from Zeki's data tool [Talent IQ](#).

Nvidia's systematic recruitment of specialists in parallel computing has given the company a significant advantage in optimising chip designs for simultaneous calculations. This is particularly important as AI models become increasingly complex and computationally intensive. By attracting senior experts in graphics and visualisation, Nvidia also deprives AMD of the essential Talent needed to enhance its competing rDNA architecture and ROCm ecosystem.

Looking ahead, Nvidia has focused on acquiring Top AI Talent in the field of robotics, aligning with CEO Jensen Huang's belief that 'robotics is the next wave of AI.' The company aims to create an 'industrial metaverse,' where robots can be trained in simulation before being deployed in the real world.

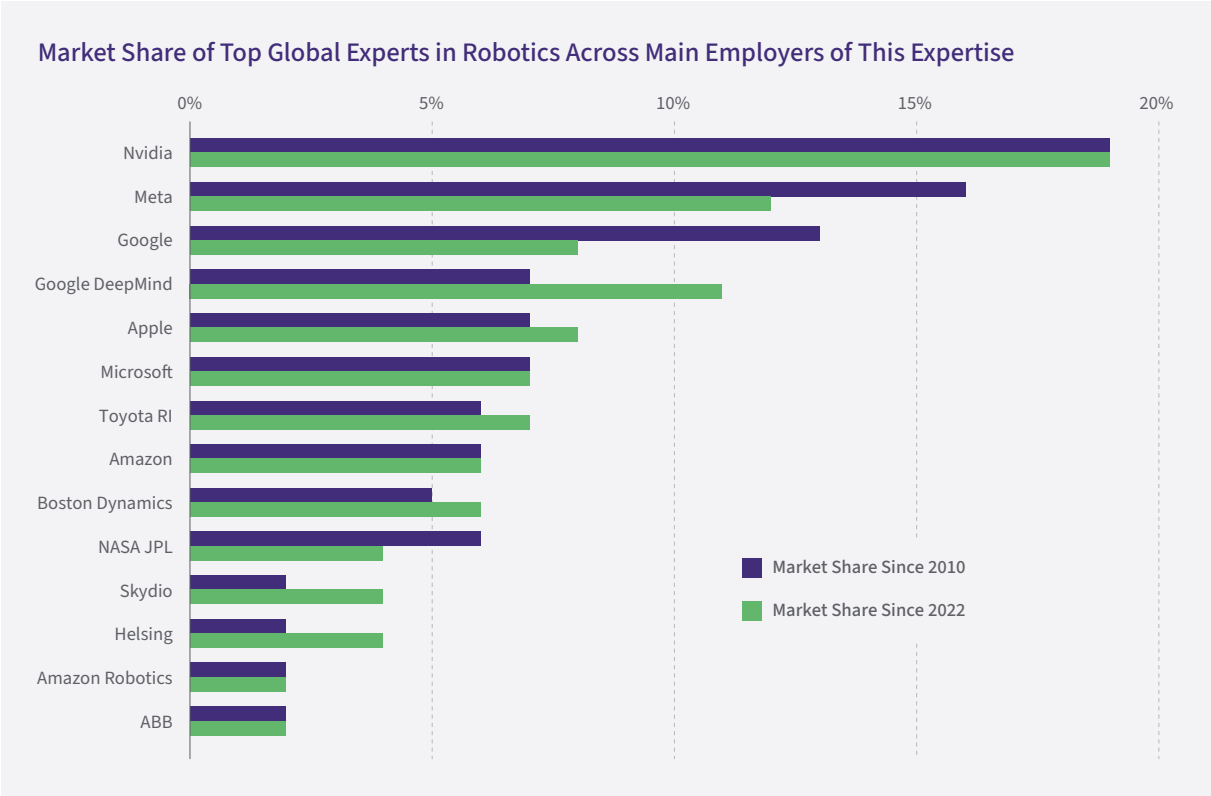
Nvidia's swift accumulation of Top AI Talent is especially notable in robotic grasping and learning from demonstration—an area of deep expertise that only about 3,150 individuals possess. These professionals are currently distributed across 1,185 companies within a dataset of 800,000 Top AI Talent. This specialised expertise is centred on enabling robots to learn skills by observing human demonstrations rather than relying on explicit programming.



Underlying data analysis for this insight is from Zeki's data tool [Talent IQ](#).

Nvidia has positioned itself as a leader in robotics software and systems due to its concentration of expertise in this area. The company offers advanced simulation environments and seamless hardware-software integrations.

Furthermore, Nvidia has achieved and sustained the highest market share of top experts in the robotics field. There are the top 10 per cent of individuals, as calculated by Zeki, who have made the most impactful innovations in their area of expertise over the last five years.

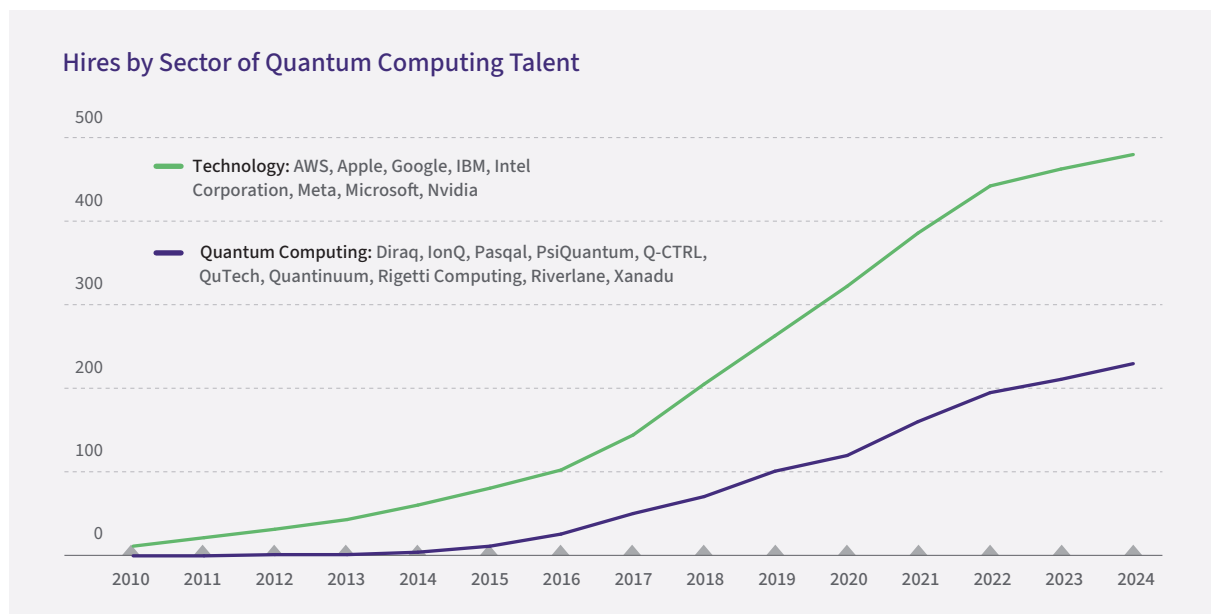


Underlying data analysis for this insight is from Zeki's data tool [Talent IQ](#).

Zeki Prediction Eight

The Intersection Between Quantum and AI Will Grow but to the Detriment of Pure Quantum Companies

Despite ongoing breakthroughs in science and engineering related to quantum technology in 2024, companies that focus exclusively on quantum technology are finding it increasingly difficult to compete for Talent in core areas such as quantum information, computing and simulation skills. This challenge arises mainly because major US tech companies like Intel, Google, Microsoft and IBM are also developing quantum computing capabilities.



Underlying data analysis for this insight is from Zeki's data tool [Talent IQ](#).

However, we are also observing a growing interest from 'pure' AI companies in acquiring expertise related to quantum physics. Notable hiring activities at companies like Anthropic and OpenAI have drawn Top Talent that would typically join quantum-focused organisations. This trend highlights their desire to diversify their skill sets in order to tackle increasingly complex algorithmic and architectural challenges to their ability to enhance and scale their LLMs effectively.

Case Study

Anthropic's hiring approach is highly selective, based on the careful scaling of the business. In recent years, they have selected half a dozen theoretical physicists trained mainly in a niche field: holographic derivation of field theories and gravity. This field explores the relationship between quantum field theories and gravity. Within Zeki's broader dataset of 800,000 Top AI Talent, only 83 individuals working at 73 organisations have this niche specialisation. Anthropic has become the primary employer.

Quantum and AI companies are now competing with major banks for this Talent, with J.P. Morgan emerging as a major hirer, establishing a dedicated Quantum Computing Research team in 2020.

Top Hires of Quantum Information, Computing and Simulation Talent in 2024/2025



Underlying data analysis for this insight is from Zeki's data tool [Talent IQ](#).

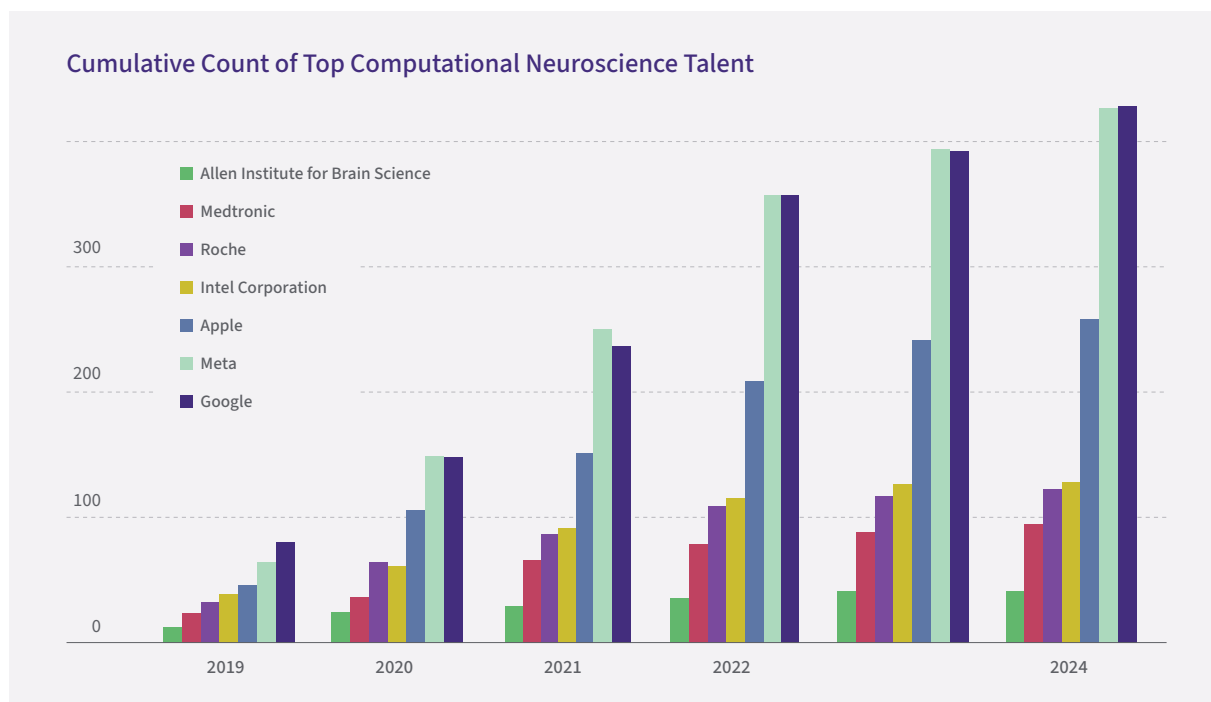
Despite increased funding into the quantum sector, even major quantum companies will still struggle to compete with Big Tech and Big Finance on salaries and progression for quantum Talent. This will increasingly become a zero-sum game as both sectors focus on attracting the very limited supply of quantum Talent with proven applied experience.

Zeki Prediction Nine

AI Companies Will Widen Their Search for Talent at a Cost to Medical Research

The race for AI dominance is also widening into specialised fields like computational neuroscience and DNA nanotechnology and bioanalytical applications. Technology giants and healthcare companies are competing to attract the same Talent in these areas but for very different purposes.

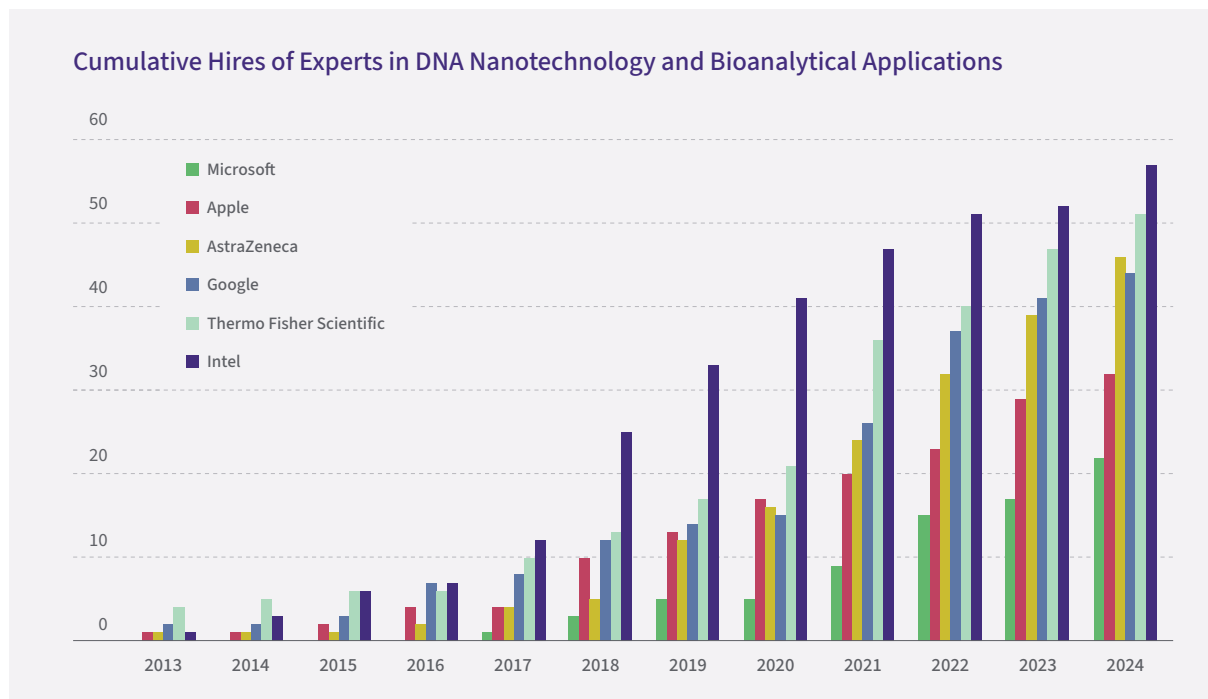
Companies such as Google, Microsoft, Nvidia and Intel are consistently outperforming traditional healthcare and research organisations in recruiting specialists in these fields as they research how brain-inspired computing architectures and molecular-scale data processing systems could drive a new wave of AI innovation. This Talent exodus poses a significant threat to healthcare organisations, hindering their ability to harness these technologies for medical research breakthroughs.



Underlying data analysis for this insight is from Zeki's data tool [Talent IQ](#).

The competition for specialised computational neuroscience Talent shows a fundamental shift in where next-generation brain research and its applications will originate—increasingly from AI labs rather than traditional medical research settings.

Healthcare companies risk falling behind in developing cutting-edge treatments and diagnostics for neurological conditions if they cannot access the expertise needed to process and analyse complex brain data.

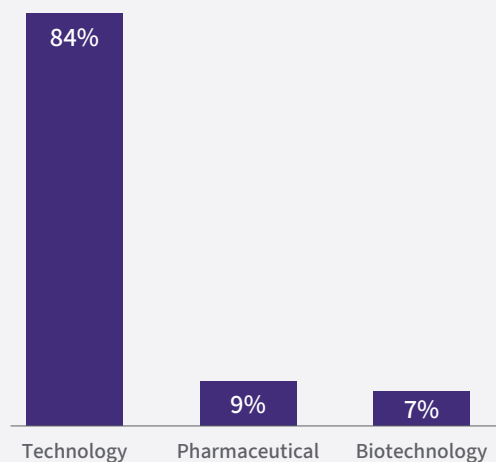


Underlying data analysis for this insight is from Zeki's data tool [Talent IQ](#).

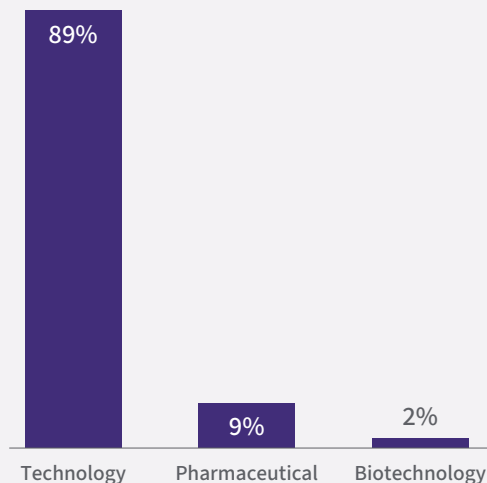
Intel and Thermo Fisher represent two contrasting applications of DNA nanotechnology. Intel focuses on transformative computing technologies, such as molecular-scale circuits and DNA-based data storage. In contrast, Thermo Fisher applies this specialised expertise to develop next-generation sequencing platforms, nanopore detection systems and single-molecule analysis tools designed to manipulate and analyse individual DNA structures with unprecedented precision.

Although Top AI Talent may share a foundational background in DNA nanotechnology, there is minimal overlap between its applications in these sectors. This divergence makes cross-sector partnerships less likely and reinforces the competitive race for expertise between the two fields.

Previous Sectors of Computational Neuroscience Experts Currently Working in the Technology Sector



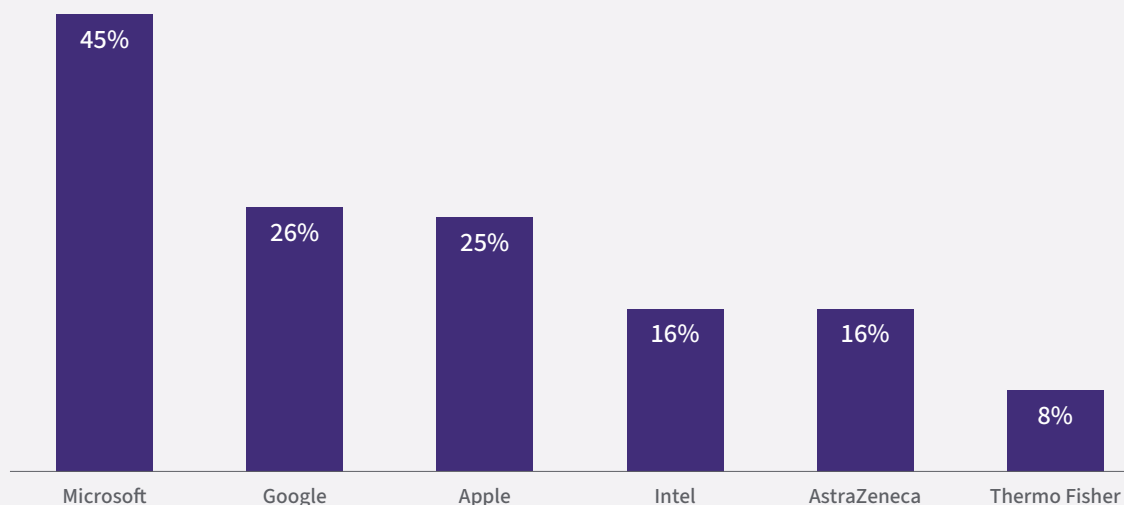
Previous Sectors of DNA Nanotechnology and Bioanalytical Applications Experts Currently Employed in the Technology Sector



Although Intel has accumulated DNA nanotechnology expertise at scale, Microsoft has achieved quality with the highest concentration of global thought leaders in the field.

Microsoft's leadership position is reinforced by its substantial investment in the Station B biocomputing initiative, which aims to program biological systems with the same precision that we use for programming computers today.

Percentage of Global Leaders in DNA Technology and Bioanalytical Applications Within a Company



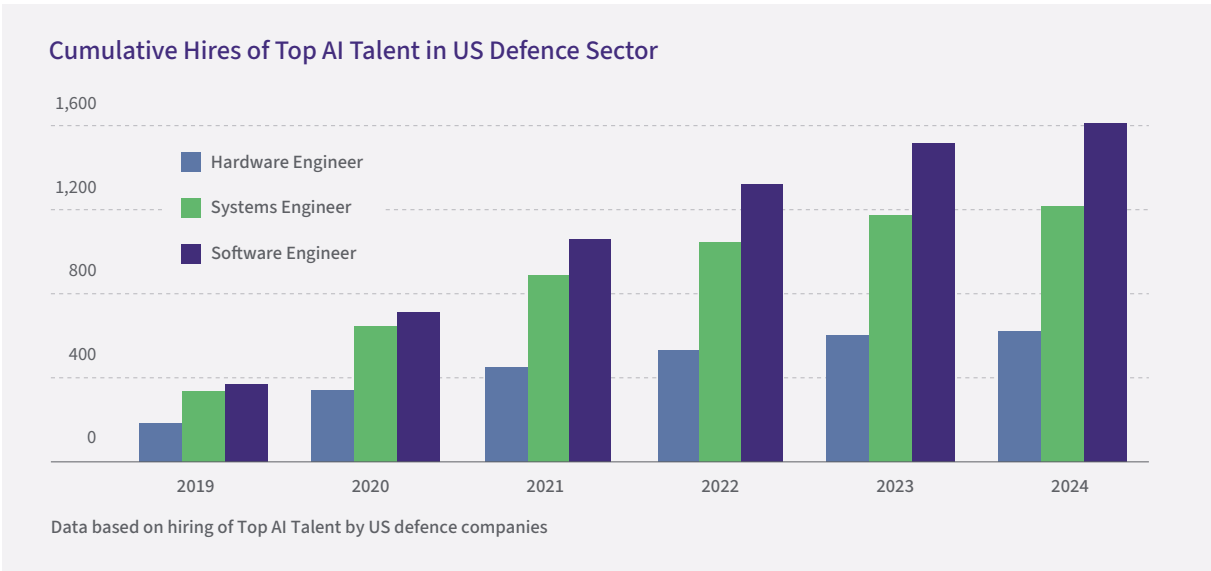
Underlying data analysis for this insight is from Zeki's data tool [Talent IQ](#).

Zeki Prediction Ten

The Defence Sector Will Buck the Trend

Top AI Talent is increasingly attracted to the complex challenges and sense of mission offered by defence companies in Europe and the US.

US defence companies have seen a 288 per cent increase in Top AI Talent attracted to work in defence in the last five years. European companies have experienced a 328 per cent increase but from a lower base.

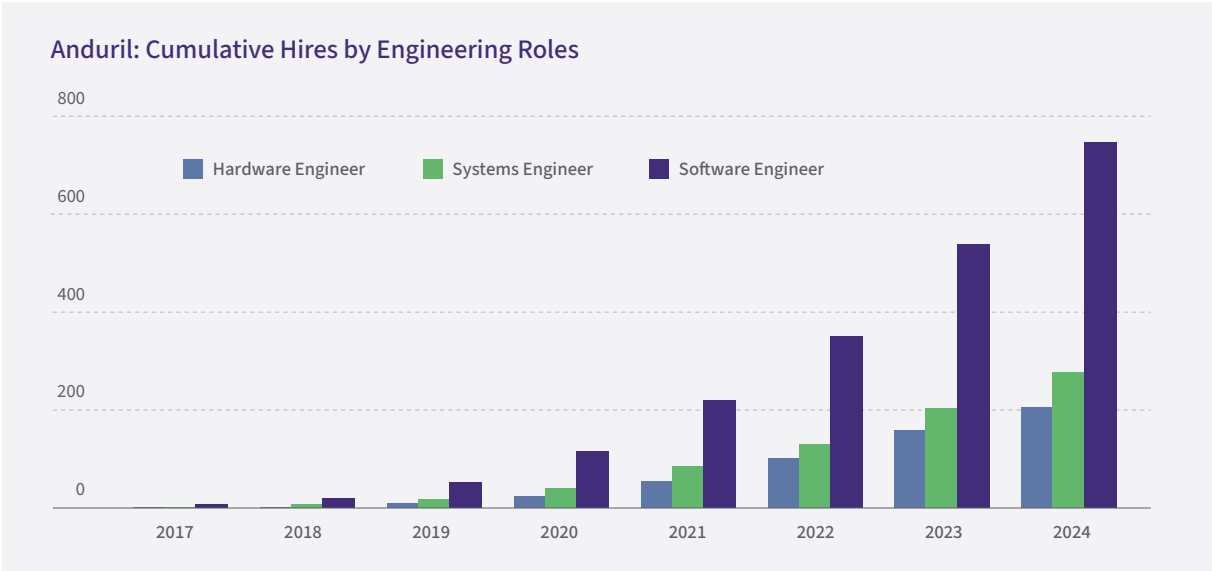


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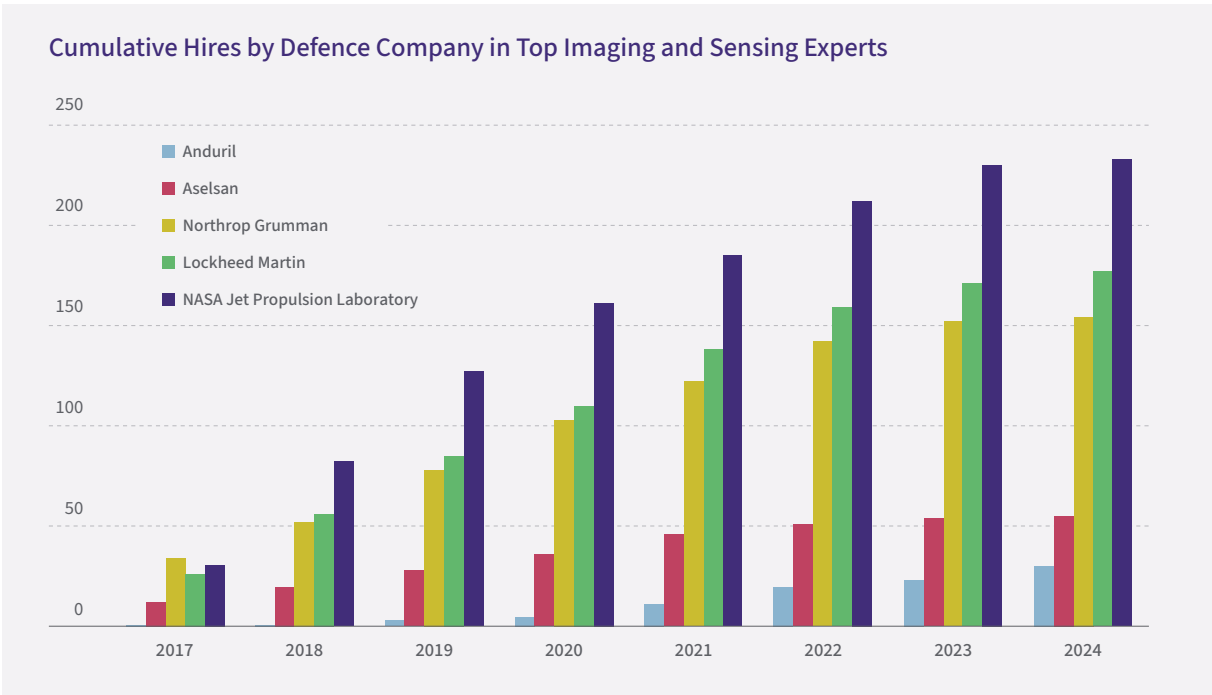
Underlying data analysis for this insight is from Zeki's data tool [Talent IQ](#).

Anduril leads the growing number of AI-first defence companies in pace and scale of Talent growth, bucking the overall trend and hiring software engineers at a much higher rate than most AI companies.



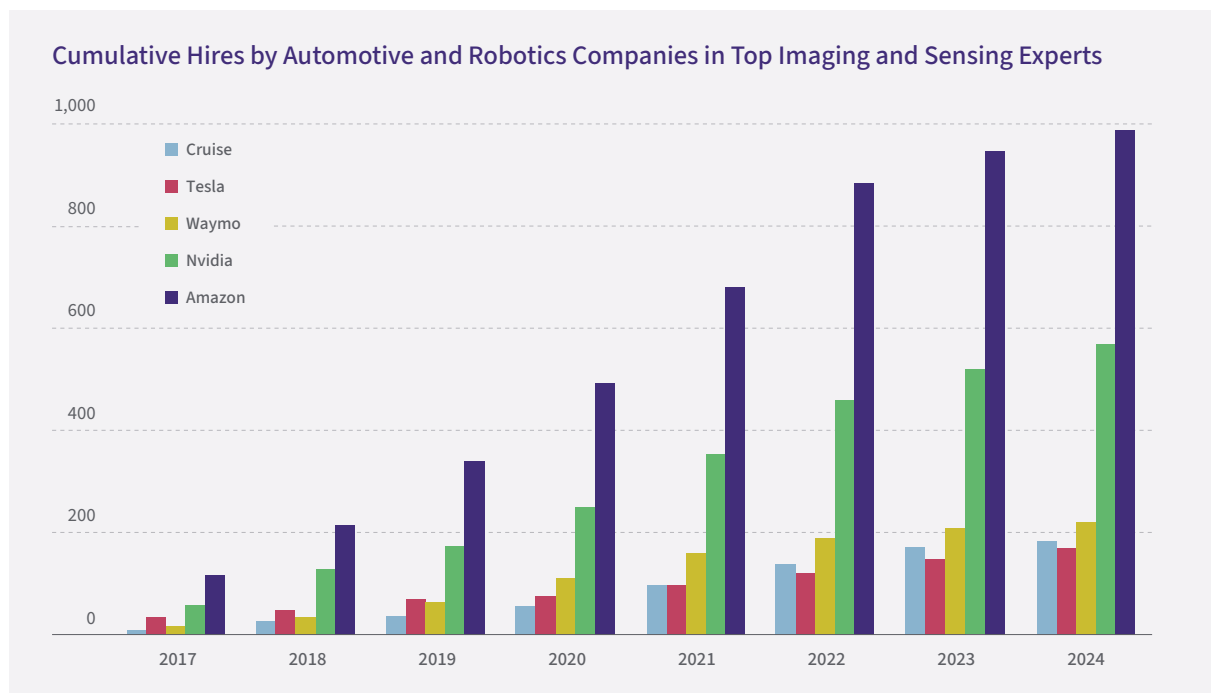
Underlying data analysis for this insight is from Zeki's data tool [Talent IQ](#).

Anduril's main focus is hiring Top AI Talent with imaging and sensing technologies expertise that underpins our autonomous warfare technologies. Major defence and space organisations are also seeking to acquire this expertise, but not at the same relative concentration as Anduril.



Underlying data analysis for this insight is from Zeki's data tool [Talent IQ](#).

However, this expertise is in high demand in other sectors, including companies building autonomous vehicles or investing heavily in robots, which are attracting this Talent in much larger numbers.



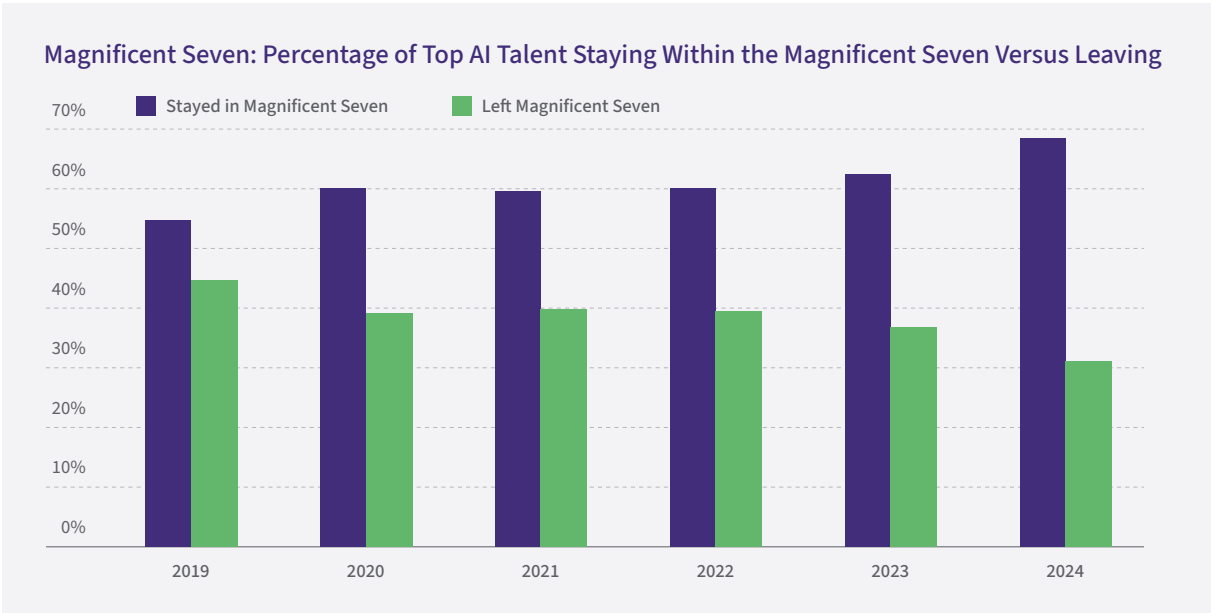
Underlying data analysis for this insight is from Zeki's data tool [Talent IQ](#).

Unlike the healthcare and quantum sectors, the defence sector appears poised to defy current trends and successfully compete with Big Tech for Top Talent in AI. A key factor in 2025 will be the level of European government spending on AI in the defence sector. According to the Stanford AI Index published in 2025, the U.S. Department of Defense accounted for 75 per cent of all public spending on AI in 2023, while in Europe, this figure was only 0.84 per cent.

Zeki Market Observation

Top AI Talent Will Increasingly Be Hidden

Companies are increasingly using AI recruitment tools to enhance the efficiency of Talent sourcing and acquisition. However, these tools risk reinforcing existing biases and creating a narrow approach to Talent sourcing among major companies. AI recruitment tools will encourage companies to hire within their own image. We are already witnessing a growing concentration of Top AI Talent being hired by the Magnificent Seven companies in the US who have previously worked at one of these firms.



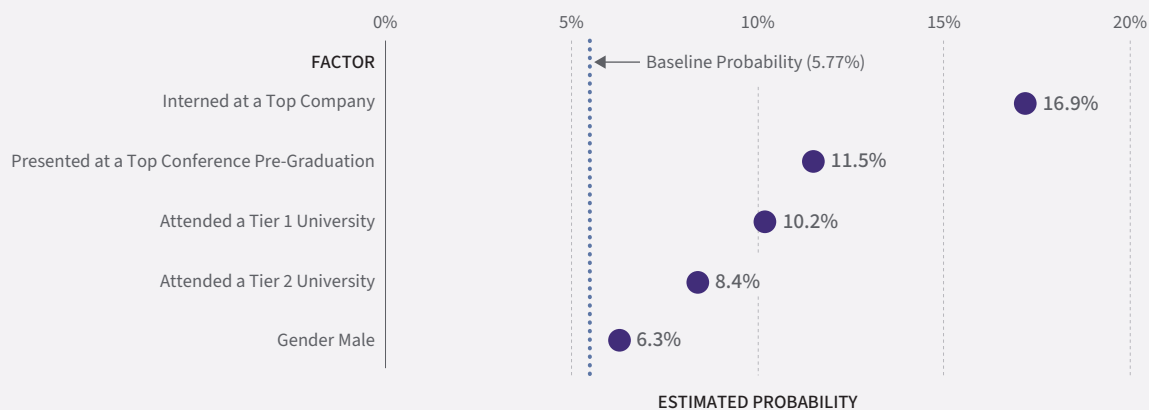
Underlying data analysis for this insight is from Zeki’s Foundational AI dataset.

We conducted regression analysis on 100,000 graduates in Machine Learning from 2019–2024 to understand what specific characteristics made them more likely to be hired by the top 200 companies in the AI and AI/health sectors.

Individuals who interned at one of these 200 companies whilst still completing their degree were three times as likely to be hired by one of these companies. Attending a top university or being selected to present a research paper at a Top AI conference doubled an individual’s chances.

Major companies are also increasingly competing for recent graduates who have attended Top AI conferences. In this case, companies outside the Magnificent Seven are even more focused and successful in attracting this Talent.

Probability of Hire at a Top Company



Underlying data analysis for this insight is from Zeki's [ML Graduates dataset](#).

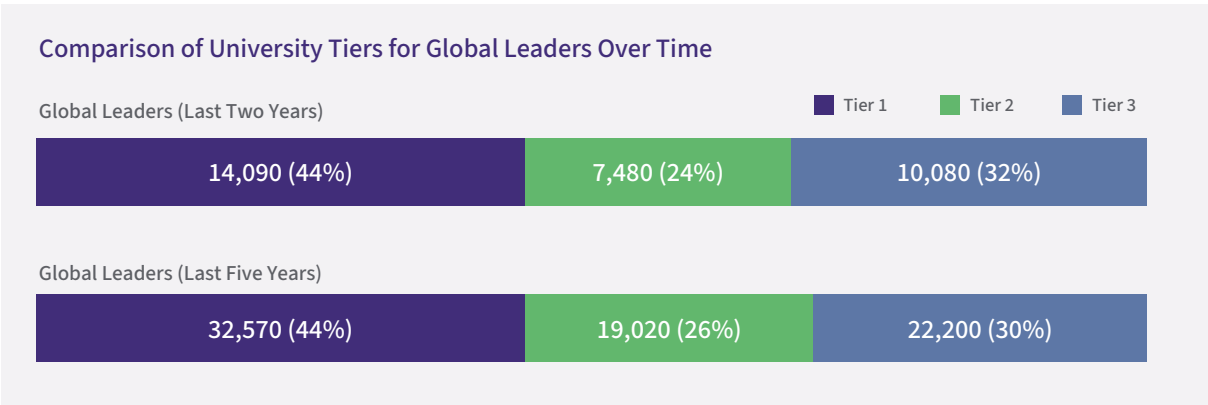
Percentage of Candidates Hired Based on AI Conferences They Attend



Underlying data analysis for this insight is from Zeki's [ML Graduates dataset](#).

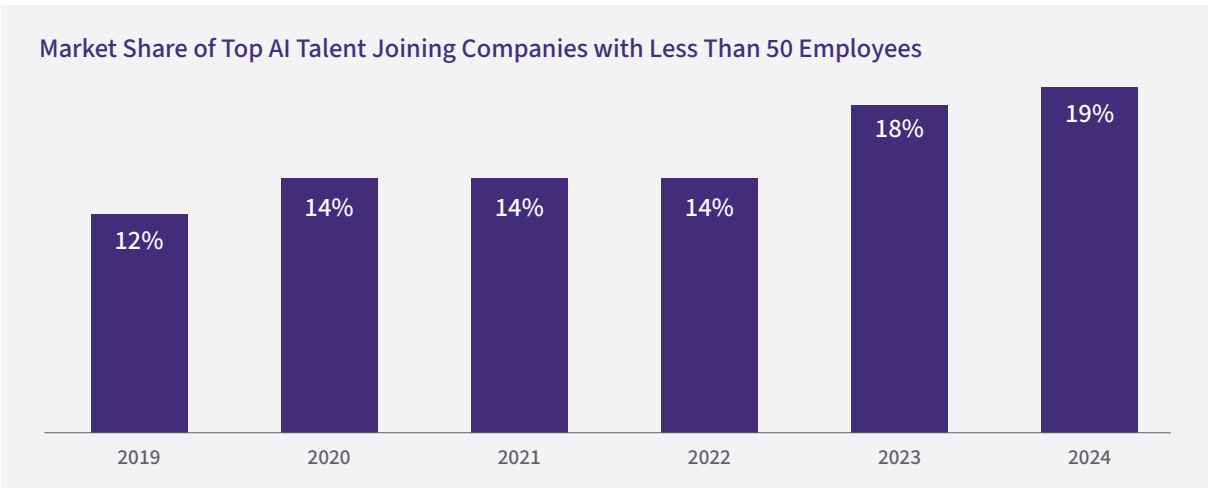
The selection processes currently in use are valid; however, they risk overlooking a significant portion of the market. Many exceptional individuals have not interned at prestigious companies, attended top-tier universities or had the opportunity or resources to travel to elite conferences.

Our analysis identified a group we refer to as ‘Global Leaders.’ These are individuals who have made the most significant impact in their fields over the last two and five years, as measured by the number of citations received for their research papers during those periods. Notably, our data revealed that over 30 per cent of these individuals did not attend top-tier universities.



In the case of early-career Top AI Talent, we are also observing a decline in the number of the best minds visible on platforms commonly used by AI recruitment tools. Due to the high demand for their skills, these individuals are less motivated to promote themselves on standard professional networking sites or to visit job-seeking platforms. Our research shows that 30 per cent of early-career Top AI Talent is not visible on standard professional networking platforms.

As large companies compete for a limited pool of similar Talent, this situation creates opportunities for companies that seek outliers and take an active approach to sourcing Talent directly rather than relying on automated tools. One significant beneficiary of this trend will be small companies and startups, which have steadily increased their market share of Top AI Talent over the past five years.



Underlying data analysis for this insight is from Zeki's data tool [Talent IQ](#).

Zeki Datasets

Zeki has identified the most innovative AI Talent globally using a proprietary scoring system, drawing on data from 30,000 open-access sources, which is matched to a high accuracy, going back up to 11 years. Gain a first-mover advantage by identifying the brightest, highly-skilled candidates for AI roles before anyone else.

To purchase a dataset, please visit www.zekidata.com/ai-datasets or contact enquiry@zekidata.com.



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Top Global AI Innovators

Gain insights into leading AI innovators, with essential core skills for AI innovation, all backed by Zeki's proprietary scoring system for strategic Talent and investment decisions.

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Emerging Top ML Talent

This cohort, finalising their degrees in 2025, is emerging as world-leading machine learning scientists and engineers operating at the highest levels of excellence.

Contains **500+** Top 2025 graduates. Similar datasets available for the classes of 2026 and 2027.



MORE TO COME...

Our team is continually compiling new, one-of-a-kind R&D Talent datasets.

If you have a bespoke dataset you would like to compile, get in touch with us to discuss further.

Index

Company	Page
ABB	33
AI Security Institute	4,24
Allen Institute for Brain Science	36
Amazon	10,11,23,33,41
Amazon Robotics	32,33
AMD	30,31
Anduril	10,11,40
Anthropic	23,34,35
Apple	10,11,23,32,33,34,36,37,38
Aselsan	40
AstraZeneca	27,37,38
AWS	10,11,34,35
BioNTech	28,29
Boston Dynamics	32,33
Bristol Myers Squibb	27
Carnegie Mellon University	25
Cloudflare	10,11
CrowdStrike	10,11
Cruise	41
D-Wave	35
Databricks	10,11
DeepSeek	20
Diraq	34
Eli Lilly	27
Epoch AI	20
ETH Zurich	25
Fortinet	10,11
GlaxoSmithKline	27
Google	4,10,11,20,22,23,25,27,29,33,34,35,36,37,38
Google DeepMind	4,22,23,24,25,32,33
Helsing	33
IBM	23,30,31,34,35
InstaDeep	29
Intel Corporation	30,31,34,36,37,38
IonQ	34,35
IQM Quantum Computers	35
J.P. Morgan	35
Johnson & Johnson	27

Company	Page
Lockheed Martin	40
Massachusetts Institute of Technology	25
Medtronic	36
Merck	27
Meta	4,10,11,23,33,34,36
MGX Fund Management Limited	16
Microsoft	10,11,23,33,34,35,36,37,38
Mistral AI	23
Moderna	28
NASA Jet Propulsion Laboratory	33,40
National Institutes of Health (NIH)	9,10
National Science Foundation (NSF)	9,10
Northrop Grumman	40
Novartis	27
Nvidia	5,10,11,30,31,32,33,34,35,36,41
OpenAI	4,23,28,34
Oxford University	25
Pasqal	34
Pfizer	27
PsiQuantum	34
Q-CTRL	34
Qualcomm	30,31
Quantinuum	34,35
QuTech	34
Rigetti Computing	34
Riverlane	34,35
Roche	27,36
Salesforce	10,11
Sanofi	27
ServiceNow	10,11
Skydio	33
Stanford Artificial Intelligence Laboratory	41
Stanford University	25
Technical University of Munich	25
Tesla	10,11,32,41
Thermo Fisher Scientific	37,38
Toyota RI	33
U.S. Department of Defense	41
Waymo	41
Xanadu	34,35

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The underlying data on which this Report is based has been compiled from publicly available sources, to which we have applied our own analytical tools and methodologies to distil our own findings and interpretations as set out in the Report.

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