DATA BRIEF

Talent in, Talent out

The Shifting Geography of the Global AI Workforce

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Tech analysis and policy ideas for Europe

interface

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Executive Summary

This data brief maps the movement of AI talent across the globe between April 2024 and September 2025. During this period, the global conversation around the AI workforce moved from brain drain to talent circularity and competitive edge, accompanied by a wave of social and economic policies designed to attract, reattract, and nurture AI talent. In Europe, political sentiment has coalesced around the demand for "sovereign AI," including sovereign talent. In the US, emerging domestic policy changes, particularly around visas, may be pushing both American and international talent to other geographies. At the same time, the world has seen a decrease in Chinese-trained AI talent in global workforces and a corresponding increase in India-trained talent internationally.

Drawing on the movement of over 1.6 million technical AI professionals worldwide, we find quantitative signals for three shifts.

First, Germany and Netherlands are emerging as Europe's frontier AI talent hubs, with the highest concentrations of talent such as AI Researchers & Engineers in the EU; other global hubs with high concentration of this talent include Ireland and Singapore. In terms of absolute numbers, the US and India remain dominant, although China's domestic labour force was not included due to data limitations. However, the share of US workers who switched to a job abroad has risen from just under 3% in 2021 to nearly 6% by 2025, according to Revelio Labs data. We anticipate the number of India-trained professionals in the EU to also grow following the recent EU–India Free Trade Agreement, which prioritises ease of tech talent mobility.

Second, Europe's education investments may be creating stronger domestic talent pools. Germany, Finland, and Switzerland are all growing their share of domestically trained AI professionals. But these gains appear regional with a shrinking international talent pool in countries like France, where salaried worker visas fell nearly 16% in a single year. The data shows that growing domestic talent and attracting foreign talent are not substitutes for each other, and without complementary strategies, countries that weaken one will feel the effects in the other.

Third, European markets may be growing quickly, but not in diversity, which is a loss for competitiveness. Europe is seeing the proportion of women as AI engineers and developers decreasing, and the gender parity gap is growing. Germany, which has both nurtured and attracted AI talent in the last year, had an increase in the gender gap by 4 percentage points**;** Similarly, in the Netherlands, the commercial backbone of female software professionals is shrinking.

Together, these findings point to the need for holistic policy approaches that treat

nurturing, attracting, and retaining talent not just as a challenge of scale, but also of inclusion. As policymakers and other relevant stakeholders move deeper into AI "race" and "leadership" narratives, it is worth pausing to ask: what kind of talent do countries actually need? Who makes up those workforces? And is the competition for more, or for better?

Introduction

The way the world talks about AI talent has changed. In Europe, a year ago the frame was brain drain. Today, it is competition: "Choose Europe for Science," the AI Continent Action Plan, the Apply AI Strategy, Union of Skills, a €20 billion bet on sovereign compute, and a political vocabulary that treats sovereign talent as a measure of competitiveness itself, all of which points to a shift in priorities and how the challenge is framed. At the same time, the US has, for the first time in decades, faced friction, through visa changes and tightened student pathways, into the pipeline that long made it the default destination for the world's AI workers. Across major destinations, the share of Chinese-trained AI talent is falling, while the share of Indian-trained AI talent is growing and set to expand through the upcoming EU and India free trade agreement's companion mobility framework. Whether this shift in political mood is translating into movement in the global AI workforce is an empirical question. This data brief, based on data from September 2025, takes a closer look at these dynamics, examining where changes have and have not occurred, and what conclusions can be drawn from them.

In 2024, interface published *Where is Europe's AI workforce coming from?*, examining the migration patterns of AI talent globally. In 2025, we published *Technical Tiers*, introducing a three-tier classification framework to distinguish between AI-literate professionals, software and data specialists, and AI researchers and engineers. This paper updates and deepens both analyses with a refreshed snapshot of labour data from September 2025, offering a year-on-year view of how AI talent flows, composition, and gender dynamics have changed over a pivotal period. The analysis draws from Revelio Labs, a workforce intelligence company that aggregates publicly available professional profiles, job postings, and related sources; the September 2025 dataset encompasses 616 million individuals in the global workforce.

Three findings define this update. First, the global competition for AI talent remains shaped by a US-India duopoly in volume, but Europe's position is shifting beneath the headline numbers. Germany is closing in on the UK for frontier AI talent, the Netherlands holds the EU's highest concentration of tier 2 talent (AI researchers and engineers) per capita, and talent-retention is strengthening: Germany, Finland, and Switzerland all increased their share of locally-trained AI professionals over the past year.

Second, the policy levers governments are pulling: visa costs, student pathways, return incentives, are visibly reshaping where AI talent goes. For the first time in years, more AI talent is moving from the US to Europe than the other way around. Provisional French data shows visa issuances for salaried tech workers have declined sharply. And the share of Chinese-trained AI talent is falling across several major hubs as Beijing's re-attraction strategies seemingly take hold.

Third, the growth of Europe's AI workforce is not automatically producing a more gender-balanced one. Across the EU, the more specialised the AI role, the fewer women hold it; and in several countries, ecosystem expansion and female representation are running in opposite directions. Europe may be building its AI capacity by too often drawing on the same narrow talent pool, rather than broadening it.

This paper presents three interactive charts examining global AI talent distribution, the foreign origins of AI talent, and the AI talent gender gap across the EU. Together, they offer updated evidence on which countries hold a competitive edge in attracting and developing talent, and where the gaps sit.

A quick note on methodological approaches and terms that are used throughout the paper.

Tier Classification is an interface-developed LLM-based classification system, defined as the following:

- **Tier 0** (AI Literate): Individuals in non-technical roles within the AI industry or those with demonstrated interest in AI but working in adjacent or unrelated fields.
- **Tier 1** (Software & Data Professionals): Technical professionals working in software development or data science, who may employ foundational machine learning techniques in their work, but do not directly develop advanced AI systems.
- **Tier 2** (AI Researchers & Engineers): Individuals employed in roles that directly involve developing, applying, or researching deep learning techniques and other advanced machine learning applications.

Talent origin is determined using the education background as a proxy for nationality, looking at the university degree locale. Similarly, gender-inference is carried out by Revelio Labs, using a binary model trained on census data for first-name distributions.

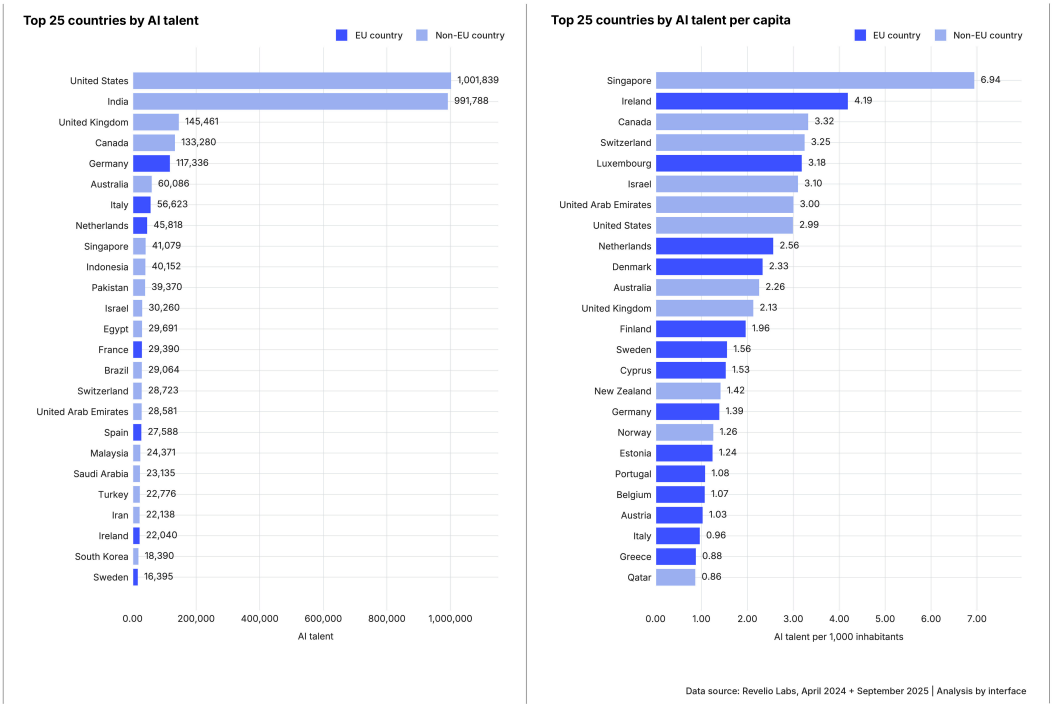
China is excluded from the main analysis, except for sections examining the global distribution of Chinese-trained AI talent. The Revelio Labs dataset lacks comprehensive coverage of China owing to limitations in its underlying sources, which rely on professional profile platforms with significantly lower penetration in the Chinese market. This constitutes a data limitation rather than an empirical finding about the size or composition of China's AI workforce; independent estimates using alternative sources suggest that cities such as Beijing and Shanghai host tech talent pools exceeding 500,000 individuals.

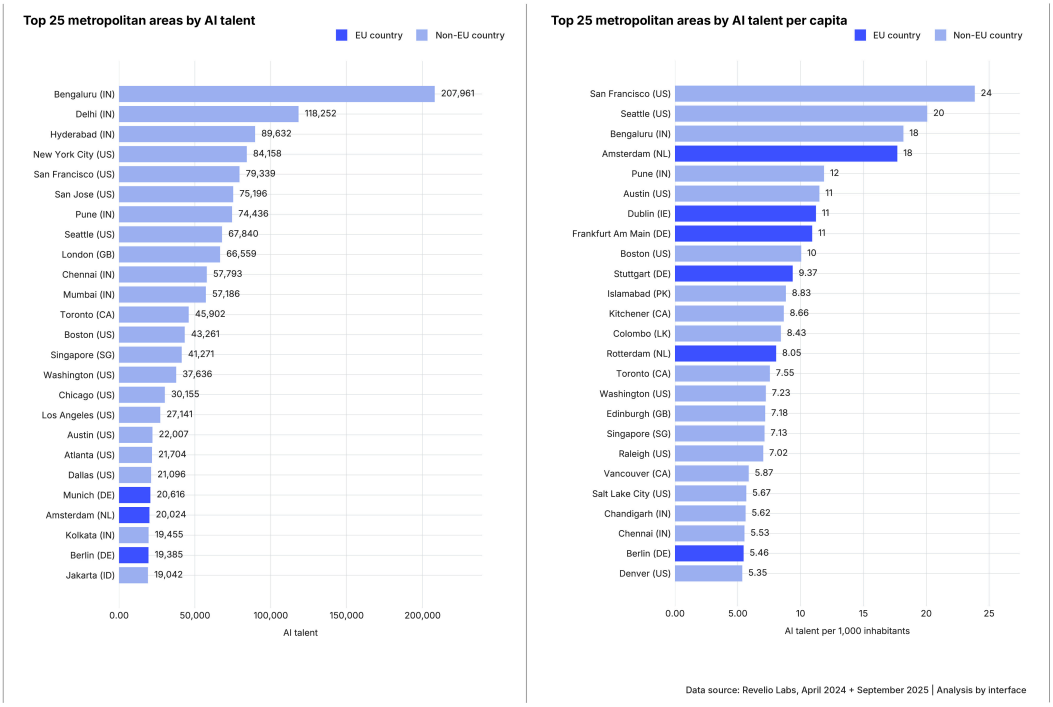
More details can be found in the Methodology section.

Section 1: Global AI Talent Distribution

This section examines the global distribution of AI talent using two complementary measures: absolute workforce size and per capita concentration. Each metric captures a distinct dimension of a country's AI ecosystem. Absolute figures reflect the scale of available talent and the aggregate capacity to support AI development, deployment, and research, a measure particularly relevant for assessing a country's ability to staff frontier labs, compete for large-scale industrial projects, and sustain diverse specialisations. Per capita rates, by contrast, reveal the concentration of AI talent relative to a country's broader labour market, offering a more meaningful basis for comparison across economies of markedly different sizes. A small country with a high per capita concentration may hold a significant competitive advantage that absolute numbers would obscure; conversely, a populous country with a modest per capita rate may nonetheless command a workforce of decisive global scale. Reading the two measures together is therefore essential to understanding both where AI talent is concentrated and where it is dense.

The analysis covers 84 countries selected based on data availability and sample robustness, with a minimum threshold of 1,000 individuals per country applied to ensure representativeness. The following charts present the top 25 countries and metropolitan areas by AI talent, displayed in either absolute numbers or per capita terms (calculated as AI professionals per 1,000 inhabitants).





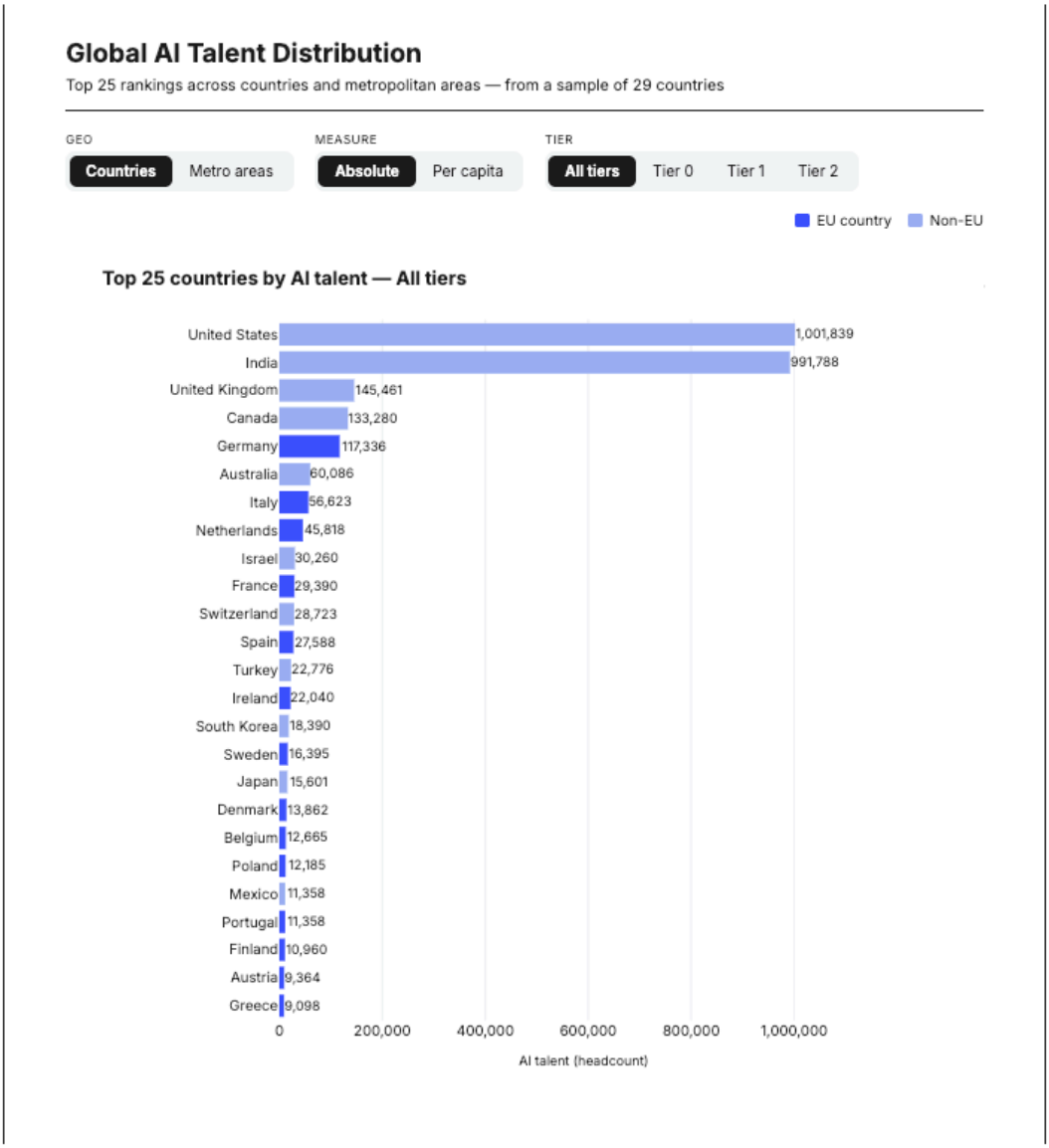
The following interactive chart disaggregates the AI workforce using the three-tier classification framework introduced in our 2025 paper, *Technical Tiers*. The framework distinguishes AI professionals by the depth of their technical engagement with AI development: Tier 0 (AI-curious and AI-literate professionals), Tier 1 (software and data professionals), and Tier 2 (AI researchers and engineers). Full definitions are provided in the methodology section.

This allows for more precise comparison across countries than a single aggregate category would permit.

The first section presents per capita data across a wider country set; the second applies the tier framework to the subset of 29 countries where sample robustness permits classification.

The distribution of AI talent across these measures reveals a landscape defined by a handful of dominant players in volume, a broader set of smaller economies competing on density, and a European cohort whose internal balance has shifted noticeably over the past year.

Chart 1: Global AI Talent Distribution



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The US-India Duopoly in Volume

Of the countries examined in this paper, the US and India lead in overall AI talent numbers. India, a global hub not only for software professionals but also for IT support and digital marketing specialists, holds the highest absolute number of Tier 0 and Tier 1 talent. The US leads in the overall size of the AI workforce across all tiers and retains its lead in absolute Tier 2 talent, though by a narrowing margin.

Eleven US cities appear in the top 25 metropolitan areas by AI talent, ten of which also

rank in the highest per capita concentrations. The densest concentration remains around Silicon Valley, with a total of 23.86 AI professionals per 1,000 inhabitants in San Francisco and 3.34 Tier 2 professionals per 1,000. Seattle, anchored by Amazon and Microsoft headquarters, follows with 2.81 Tier 2 professionals per 1,000, consolidating its position as a frontier AI geography.

India, on track to become the world's third-largest economy, trails the US in absolute AI workforce only narrowly. Several Indian cities host significant concentrations of AI talent, supported by an IT industry that generated approximately $300 billion in FY2026 and serves as the technical backbone for numerous multinational firms. Google and Microsoft have announced investments in the billions, employing thousands, building new data centres, and expanding local workforce pipelines. The country has actively courted global investment and scaled domestic human capital development, launching the IndiaAI Mission in 2024 to strengthen the broader AI ecosystem, including through the training of over 8,000 undergraduate students, 5,000 postgraduate students, and 500 PhD candidates.

Bengaluru has over 207,000 AI professionals, more than double the highest American city. The city, known as the Silicon Valley of India, ranks first overall both for absolute numbers of AI talent and talent per capita. The city hosts 880+ Global Capability Centres (GCCs). Bengaluru-based startups have raised 46% of all venture funding in India since 2016. However, at a time when top AI talent is being courted with offers of millions, India's talent is seen as a low-cost labour alternative, a fact reiterated by state governments like Karnataka, emphasising a median software professional salary of $12,000 USD, compared to $131,450, the median salary in the US. Similarly, cities like Hyderabad, Delhi and Pune represent key cities in the Indian tech landscape, expanding the AI talent pool. Many of these cities remain very focused on up/reskilling, as Hyderabad has done through its Telangana Academy for Skill and Knowledge (TASK) Institute, which aims to train 250,000 AI engineers. These cities reflect the strategic investment different Indian states have been to create policies that drive investment and create hubs for international companies looking to open tech offices where there is a strong human capital foundation.

Europe’s AI Talent Landscape

Following the doubling of the EU AI workforce between 2016 and 2023 and the proliferation of national AI strategies, Europe's position in these charts reveals both emerging strengths and persistent limitations. Since 2025, the continent has announced or implemented a range of programmes aimed at expanding its AI talent pool and improving its competitiveness in attraction and retention. The Union of Skills, launched in March 2025, set out the ambition to strengthen Europe's human capital and labour market, while the Digital Europe programme committed €27 million in April to boosting digital skills.

Consistent with our 2024 findings, Europe's per capita AI talent landscape remains dominated by small, established tech economies: Ireland (4.19), Switzerland (3.25), and Luxembourg (3.18) per 1,000 inhabitants.

Germany now ranks fifth globally in absolute AI talent, and fourth in absolute Tier 0 and Tier 2 talent. With over 17,000 Tier 2 professionals, it has consolidated its position as one of Europe's leading frontier AI hubs. It also ranks fifth globally for Tier 1 talent, with more than 75,000 individuals, and holds nearly 25,000 in Tier 0. Berlin and Munich are closely matched across all tiers, separated by fewer than 1,000 individuals; among EU member states, Munich leads on Tier 2 with over 3,000 professionals, followed closely by Berlin at 2,850. Per capita, Frankfurt and Stuttgart rank higher than Berlin, reflecting the emergence of new AI hubs beyond the country's established tech capitals.

These workforce patterns mirror the broader ecosystem: in 2025, the German AI startup landscape grew by 36% year-on-year, with Berlin and Munich emerging as the leading hubs on the strength of international reputation and available capital. Germany also launched its High-Tech Agenda in 2025, aimed at attracting and retaining skilled talent across companies, research infrastructure, and universities, alongside programmes for young STEM talent such as the MINT Action Plan and Klischeefrei initiative to strengthen gender equity in technical careers.

Italy and the Netherlands have also emerged as AI talent hubs in absolute terms, while Ireland holds the highest per capita pools for Tier 0 and Tier 1. Revelio Labs data indicates that the Netherlands is becoming a leading destination for US tech talent outflows, trending upward more sharply than its European neighbours. Amsterdam ranks fourth globally for AI talent density per capita, with 2.46 Tier 2 and 11.57 Tier 1 professionals per 1,000 inhabitants. Rotterdam follows as an emerging hub, at 5.26 Tier 1 and 1.12 Tier 2 per 1,000. The Netherlands also maintains international graduate retention rate roughly double the European average.

This strong technical base, however, has not translated into commensurate commercial scale. Dutch venture capital investment remains below the European average and is concentrated in early-stage rounds rather than scaled startups. That said, 21% growth in scaleups and 16% growth in Dutch-founded startups suggests that the country's technical talent pool is still advancing its capacity to design and deploy AI products.

Across all tiers, Munich, Amsterdam, and Berlin are the EU's only representatives in the top 25 metropolitan areas by absolute AI talent. Paris, Milan, and Dublin are absent from this ranking despite the strong per capita concentrations in Italy and Ireland. While this partly reflects the mathematical challenge smaller countries face in producing large metropolitan clusters, it also signals the ascendance of Germany and the Netherlands as Europe's emerging AI talent leaders; and the corresponding reshaping of intra-European flows toward these new centres of gravity.

France illustrates this shift most starkly. Prominent in our 2024 analysis as a European tech leader, France has seen its national ranking drop significantly. Paris remains one of Europe's tech capitals, home to dozens of AI labs and hundreds of AI startups, but the country faces growing challenges in retaining talent; even following a relaxation of the foreign worker tax for employers hiring non-EU nationals. Provisional French immigration data indicates that long-term talent visas declined by 7.9% in 2025, driven primarily by a 15.9% drop in visas for salaried workers, including in tech. Over the same period, visas under the *compétences et talents* category, including for scientific fields, rose by only 1.4%.

These trends reflect what the Macron government has identified as a central challenge for European competitiveness: financing. France retains a robust AI ecosystem, but the pace of change in talent dynamics has allowed other European countries to attract and retain AI professionals more effectively.

Other Emerging AI Talent Hubs

Beyond the established players, several smaller, well-capitalised economies have used explicit talent strategies to achieve per capita concentrations that rival, and in some cases exceed, those of much larger countries.

Consistent with our 2024 findings, Singapore retains the highest global position for AI talent per capita, at 6.94 professionals per 1,000 inhabitants. Sustained investment in becoming an AI hub has produced measurable returns: more than half a million Singaporeans participated in SkillsFuture, the national training credits programme, in both 2024 and 2025. Additionally, over 60% of the population in both Singapore and the UAE had used a generative AI tool in the past year, the highest rates of AI diffusion globally.

The United Arab Emirates has likewise grown into a rising AI talent hub. Its national AI strategy for 2031 positions talent attraction and training as foundational objectives and emphasises the country's institutional and geographic capacity to compete for top tech talent and investment. The UAE leads Gulf countries in AI infrastructure, with 35 active data centres and approximately $46.1 billion in investment. Emirate-level initiatives complement the national strategy: the Dubai Future Foundation and Dubai Centre for Artificial Intelligence have launched AI training programmes such as One Million Prompters, which aims to train one million people in AI fundamentals between 2024 and 2027. Between 2016 and 2025, the UAE saw an 80-fold increase in the number of LinkedIn members adding AI skills to their profiles, far exceeding the global average.

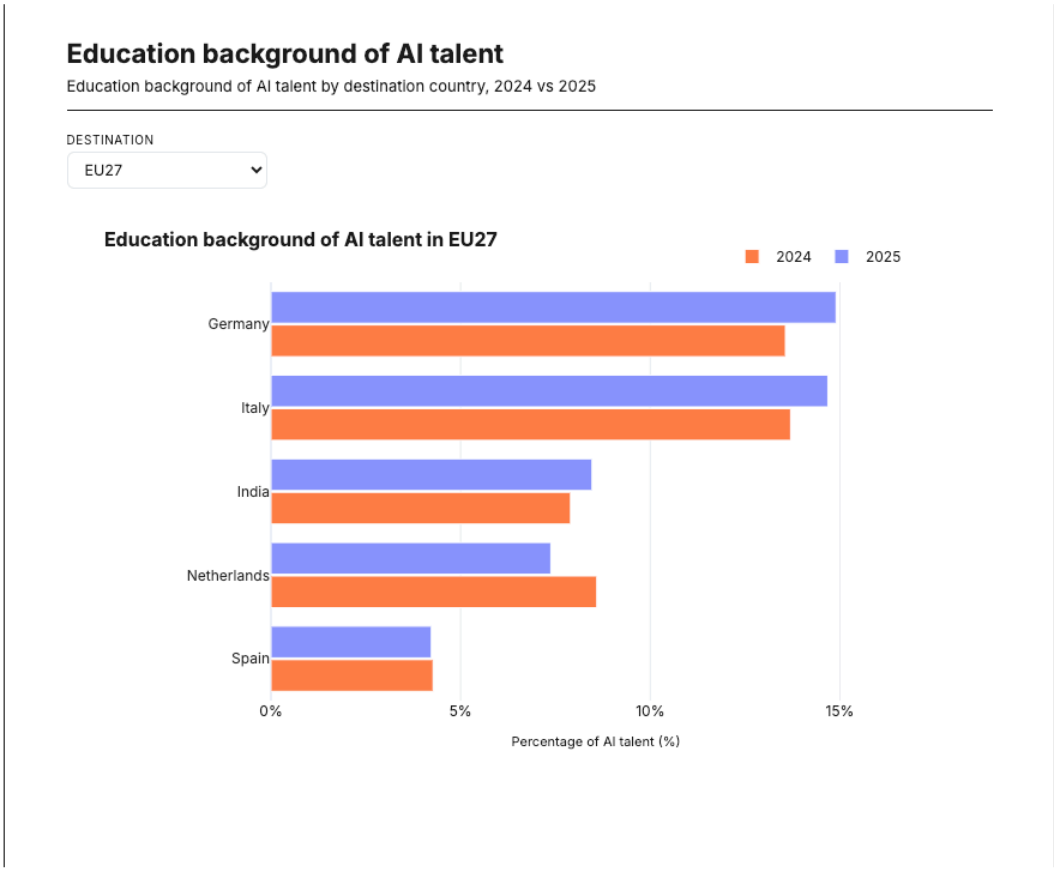
Consistent with previous *interface* research, Israel continues to demonstrate one of the world's highest concentrations of AI talent per capita, at 3.10 professionals per 1,000 inhabitants, and ranks seventh globally in absolute Tier 2 talent. Long recognised as a

startup nation, Israel benefits from extensive government investment in early-stage innovation, significant military R&D spending, and deep links between defence and industrial research, all of which contribute to the country's sustained technical performance.

Taken together, these findings point to a landscape where competition for AI talent is playing out simultaneously at multiple scales. Countries remain the most visible actors, but cities and regions are increasingly where talent concentrates and moves: San Francisco and Seattle within the US, Bengaluru and Hyderabad within India, Munich, Frankfurt, and Stuttgart within Germany, Amsterdam and Rotterdam within the Netherlands, and Dubai within the UAE. Smaller, deliberately capitalised economies such as Singapore, Ireland, Luxembourg, and Israel have achieved per capita concentrations that rival much larger players, while within Europe, the centre of gravity is shifting toward Germany and the Netherlands. The result is a more diverse map of AI talent than headline national rankings alone would suggest.

Section 2: Education Background of AI Talent

Chart 2: Foreign Origin of AI Talent



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This section examines where AI professionals receive their first university education, using the country of undergraduate degree as a proxy for country of origin. This proxy is generally reliable: OECD data indicates that only 8% of bachelor's degree students in OECD countries study internationally, meaning most professionals pursue early education in their home country. Notable exceptions exist and are addressed in the methodology section.

Chart 2 disaggregates the AI workforce by educational origin across destination countries, with year-on-year comparisons between 2024 and 2025. Three patterns emerge from the data: domestic educational pipelines are strengthening across much of Europe, Indian-trained talent is expanding its share in most major destinations, and the US

pipeline, long the default destination for foreign AI talent, is contracting under visa and funding pressures. These shifts are occurring in parallel and, in several cases, amplifying one another.

Strengthening Domestic Pipelines in Europe

Across the EU27, four of the five most common educational origins of Europe's AI workforce are EU member states (Germany, Italy, the Netherlands, and Spain). Between 2024 and 2025, there has been measurable growth in European-trained AI talent. This pattern is most visible at the national level. Within Germany, 49.8% of AI talent received their university degree domestically, up from 46% in 2024. Switzerland, historically a net talent importer, saw its domestically trained AI share rise from 32.7% to 35.8%. Finland, which has invested heavily in AI education, recorded one of the sharpest year-on-year increases in the dataset, from 50.2% to 59.1%, while Norway rose from 44.6% to 47.9%. Taken together, these movements suggest that targeted investment in domestic AI education is translating into measurable workforce gains within a short time frame.

Domestic capacity-building has not come at the expense of international attraction. Few countries are as central to the global AI talent ecosystem as India, which accounts for over 16% of the global AI workforce. Across EU Member States, Indian talent has grown from 7.7% to 8.3% in one year, reflecting ongoing efforts to increase cooperation between the EU and India. Some tech hubs like Ireland seeing a jump from 21.9% to 29.8% of its Indian AI talent. The trend is similar in non-EU countries as in the UAE, Indian AI talent rose from 28.2% to 33.4% last year; and in the US, from 15.6% to 19.0%.

In Germany, Indian student enrolment increased nearly 20% as the country positions itself as an education magnet for talent for talent no longer going to the US. Similarly, the Netherlands has a 'Welcome to NL' initiative which aims to attract foreign talent in key sectors like AI and ICT. Both countries host websites that allow users to navigate roles in each country in multiple languages with Germany's *Internationaler Webauftritt der BA* offers personalised career prospects in different languages. Additionally, many top tech hubs in Europe, including Germany, the Netherlands and Ireland offer financial incentives around non-nationals emigrating, including tax breaks and language training, all geared at attracting non-European nationals into key sectors and industries.

These flows also precede the January 2026 EU–India Free Trade Agreement and its companion mobility and migration framework, which establishes legal pathways for Indian professionals across 17 services sub-sectors, including IT and R&D. Once in force, the agreement is expected to further formalise and accelerate the circulation of Indian AI talent to the EU in the years ahead.

Disruptions to the US Talent Pipeline

The US has long been the default destination for top AI talent, supported by its frontier labs, globally recognised universities, industry leaders, and high compensation levels. Recent policy shifts and geopolitical tensions might be introducing friction into this talent pipeline.

In September 2025, the Trump administration announced that H-1B visas, the employer-sponsored pathway for technical foreign workers, would carry an additional $100,000 fee, including for amendments and extensions of existing visas. Immigrant, student, and exchange visas for nationals of specific countries were eliminated and later expanded to further countries. The administration also proposed limiting international students to fixed time periods, which would prevent them from transitioning to the US workforce through Optional Practical Training (OPT), the programme that currently allows students up to 36 months of post-study training. Visa wait times have increased significantly in cities worldwide.

Funding has compressed in parallel. The administration cut billions in science funding across non-defence disciplines, contributing to a sharp drop in student arrivals: Indian and Chinese student arrivals declined by 46% and 26% respectively in the last year. These disruptions are consequential for a country where foreign workers account for 67% of top AI researchers at US institutions and over half of all PhD recipients in computer science and mathematics. The educational pipeline reflects the same exposure: 67% of AI software-related master's graduates in the US are non-residents, a population now directly affected by federal actions on student visas. While the full workforce impact of these policies will take years to materialise, the early signal shows that the US model, which has long depended on training foreign students and converting them into domestic workers, is operating under unprecedented pressure.

Decline in China-trained AI talent globally

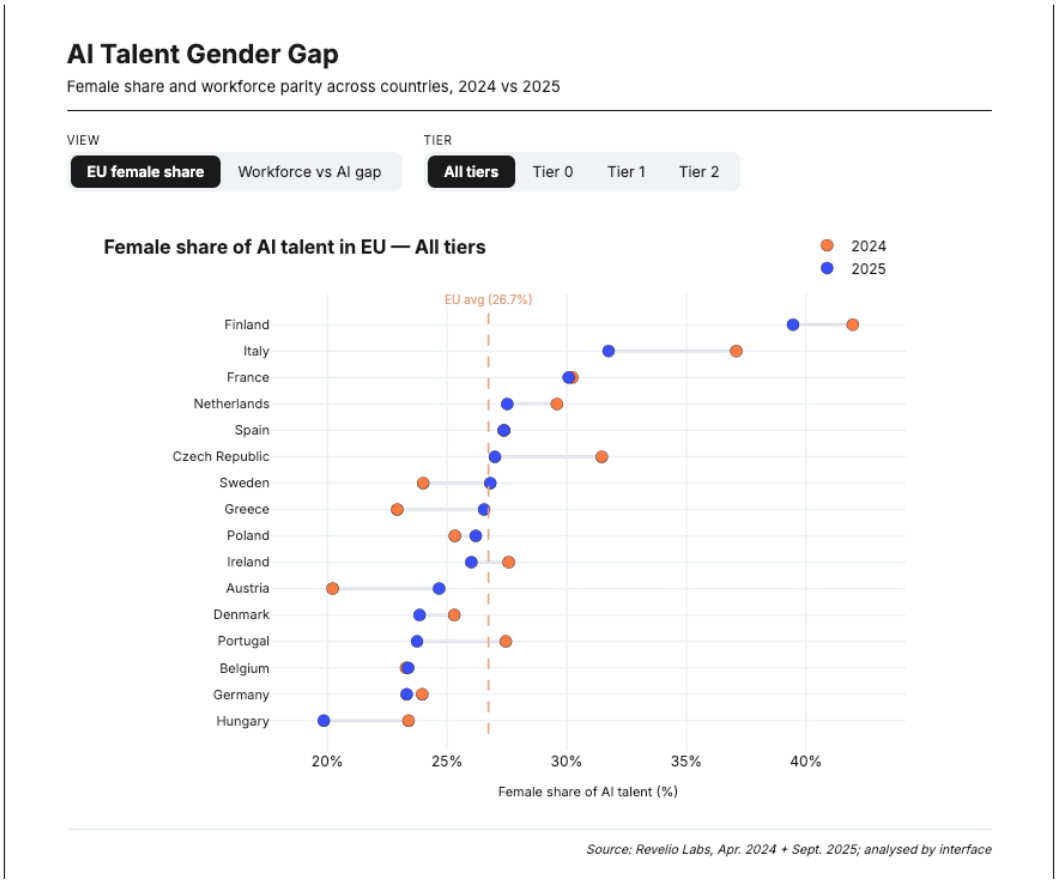
Alongside tightening conditions in the US, the share of Chinese-trained AI talent working abroad has also been declining across every major destination in our dataset. In France, it went from 6.2% to 4.5%, while in the US it went from 10.6% to 7.7% in that same period. Singapore saw the percentage of Chinese AI talent drop from 15.3% to 10.8%. Chinese returnees are nothing new, but the rate seems to be increasing. In 2018, the US launched the Chian Initiative, incentivising scientists of Chinese descent to leave the country, increasing the departures of these scientists by 75%, even as overall migration rose. Coupled with fears around espionage, restrictions in research funding, and aggressive re-attraction strategies from Beijing, top talent is returning to lucrative funding opportunities and professional opportunities. The well-publicised return of some star

talent has made headlines, amplifying visibility for opportunities and the return to China pipeline.

This chapter reveals the parallel contexts in which AI workforces are seeing the push and pull influences of domestic and foreign policies, shifting education and hiring patterns globally. The growth of domestically educated European talent points reflects the strengths of many academic institutions, as well as correlations to a greater degree of talent retention. While more time is needed to see how policy changes from the major AI players will impact talent concentration and migration patterns, this analysis captures how even small annual changes can provide insight into how countries are building their labour force in a globally competitive market.

Section 3: AI Talent Gender Gap

Chart 3: AI Talent Gender Gap



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This section examines the rate of change in the proportion of women in the AI talent pool

across EU countries, as well as the workforce parity gap: the difference, in percentage points, between women's share of a country's total workforce and their share of its AI workforce.

Chart 3 disaggregates female AI professionals in the three talent tiers, with year-on-year comparisons of gender parity in select EU countries between 2024 and 2025. The data reveals a story of diverging national trajectories, where countries with growing AI ecosystems are not necessarily becoming more inclusive: leading tech countries are seeing the proportion of women decrease, while others have concentrated diversity challenges among data and software professionals, the commercial backbone of the tech industry. Even performance gains must be critically examined, as some countries with improved proportions of women may be due in part to shrinking overall AI talent pool size. The picture that emerges across the EU is not one of uniform progress or uniform decline.

Across the EU countries in our sample, the average female share of tier 0 talent is 36.7%, dropping to 24.9% at tier 1, and falling again to 20.9% at tier 2. The gradient is steep and consistent: the more specialised the AI role, the fewer women hold it. Similar research conducted by the ILO in 2026 found that women constituted approximately 30% of the AI workforce in 2022, only four percentage points more than in 2016. A similar gradient appears in AI-related degree completion: women account for just 22% of bachelor's graduates and 29%of master's graduates in ICT fields across OECD countries, despite comprising nearly 60% of all degree recipients. In the United States, women's highest representation in AI software-related degrees peaks at 36% of master's graduates, substantially exceeding the 24.9% EU average in Tier 1. The pattern holds across both workforce and educational data: the more technical the credential or role, the fewer women hold it. In some countries, the gender gap is narrowing at the top while widening at the bottom. In others, the opposite is true. And in a few cases, both are happening at once.

The three country cases below illustrate the distinct dynamics at work.

Germany: Relying on a Narrow Talent Pipeline

Germany’s AI ecosystem is expanding rapidly. The German AI startup landscape grew 36% in 2025, and the country is increasingly positioning itself as a frontier hub for tier 2 talent. Yet the female share of that talent moved in the wrong direction across every tier between 2024 and 2025. At tier 0, it fell from 30.4% to 28.9%, the lowest in among EU countries and well below the 36.7% average. Minimal changes were observed in tier 1 talent (22.7% to 22.4%), while tier 2 talent dropped from 21.4% to 19.3%, slipping below the EU average. Germany's workforce parity gap, the difference between women's share of the overall labour market and their share of the AI workforce, widened from 19.2% to 23.3%, one of the sharpest increases in the dataset.

Germany is a country where the broader labour market includes women at rates that simply are not translating into the AI sector. Interface's earlier research showed Germany ranks among the top European economies on broader gender equality indices while maintaining some of the EU's lowest female AI workforce share — a paradox that has only deepened. The country has a structural IT specialist gap of approximately 109,000 unfilled positions, with more than 85% of companies reporting insufficient talent. Meanwhile, men are being hired at a disproportionately high rate for entry level AI, data, and analytics roles, the only roles in the European tech scene with growing entry level demand. Germany is building its AI capacity, but it appears to be doing so by drawing on the same limited talent pool rather than broadening it.

The entry-level picture reinforces this concern. In the US, employment among software developers aged 22 to 25 fell nearly 20% from 2024, even as older cohorts continued to grow. If the same dynamic holds in Europe, preliminary evidence suggests that countries like Germany risk building their AI capacity on experienced hires and lateral moves rather than expanding the base of who enters the field, a pattern that structurally disadvantages women and other underrepresented groups not already in the labour market.

France: Progress or Composition Effect?

France tells a different story, though one that requires careful interpretation. At tier 0, the female share fell notably from 40.4% to 34.4%. But at tier 1, France was among the few countries to register an increase (28.2% to 29.7%), and the proportion of women in tier 2 roles grew from 23.8% to 24.6%, placing it above the EU average. France's workforce parity gap also narrowed, from 21.5% to 19.8%, one of the few EU countries where this happened. The temptation is to read this as progress, and at the higher tiers it may well be. But it is worth pausing on what these proportional shifts can and cannot tell us.

Our data on the educational origins of AI talent shows France's workforce becoming more domestically sourced, as the share of French-educated AI professionals rose while the share of Indian and Chinese talent decreased. While France remains the largest net European destination for US tech workers, overall flows in both directions have declined. This means the observed gains in gender equity may be a compositional effect, wherein the improved female shares in tiers 1 and 2 reflect the international talent pool, which skews male, shrinking, rather than women entering France's AI workforce in greater numbers. This could mean that France's apparent progress on gender may be a byproduct of its broader struggle to attract and retain international AI talent, rather than a sign that the structural barriers for women are coming down, something that warrants additional investigation.

The Netherlands: A Gap in the Commercial Middle

The Netherlands sits in a position that warrants particular attention. It holds the highest concentration of tier 2 AI talent per capita in the EU, and within that tier, the female share held steady, matching France at 24.6%. At tier 0, the Netherlands improved from 37.1% to 39.2%, one of the stronger gains in the dataset. But at tier 1, the software and data professionals who form the commercial backbone of any AI ecosystem, female representation dropped sharply, from 28.0% to 24.6%. This reflects structural changes in the country: the Netherlands has the lowest share of women in STEM vocational education in Western Europe, at just 10.5% of VET STEM learners, compared to the 15.4% EU. Its childcare costs are among the highest in Europe relative to women's median earnings and stalling economic participation by women has led to the country dropping 15 places to 43rd on the WEF Global Gender Gap Index in 2025. The Netherlands appears to be retaining women at the most elite level of AI research while losing them in the roles where commercial AI products are deployed and scaled.

Beyond these countries, growth across Europe's AI workforce is not automatically producing a more gender-balanced one, and in several cases, gender balance is decreasing. This matters beyond questions of representation alone. 4.7% of female employment globally falls into the highest generative AI exposure category, compared to 2.4% for men — rising to 9.6% versus 3.5% in high-income countries. Women are not only underrepresented in the workforce shaping AI; they are overrepresented in the workforce most likely to be reshaped by it.

This reveals the fundamental paradox of Europe’s gender equality goals within its AI workforce. Despite the rise in STEM graduation rates of European women, their workforce share declined. Even as they hold higher formal qualifications than men , they are not progressing into senior roles at equal rates. Many of the changes identified through this data analysis are differences of single digit percentage points. While small, these developments should be interpreted as early signals rather than definitive trends, highlighting the persistent diversity challenges across the European tech sector.

Conclusion

The policy context for AI talent has shifted visibly over the past year. The EU has advanced a sequence of initiatives that treat talent as a dimension of competitiveness, including the AI Continent Action Plan, the Apply AI Strategy, the Union of Skills, and Choose Europe for Science. The US introduced additional costs and restrictions into its foreign worker and student visa pathways, while China implements reattraction strategies to draw its own talent back. Indian-trained talent is growing as a share of the AI

workforce across every major destination in the dataset, a trend that the January 2026 EU and India Free Trade Agreement and its companion mobility framework are expected to accelerate. The findings in this paper offer an empirical checkpoint on what has moved in the global AI workforce between interface's July 2024 report and September 2025.

Three findings stand out. First, the US and India lead in absolute volume, but the conditions sustaining that position are changing on both sides. In the US, recent changes to H-1B fees, student visa rules, and science funding have introduced friction into the pipeline that has historically converted foreign students into domestic workers. The impacts of these policies on a country where 67% of top AI researchers at US institutions were born abroad remains to be seen, although other countries now see a strategic opening for their own talent attraction pipelines. India now accounts for over 16% of the global AI workforce, and Indian-trained talent is expanding its share in most major destinations, indicating that the country is increasingly a source of talent for other ecosystems as well as a hub in its own right. Within Europe, Germany is closing in on the UK for frontier AI talent, and the Netherlands holds the EU's highest per capita concentration of tier 2 professionals, a new hub for top AI development talent.

Second, the geography of AI talent is less stable than it was a year ago. Visa regimes, funding cuts, and re-attraction strategies are producing measurable movement in the dataset within a single year. Domestically trained talent is growing as a share of the overall AI workforce in Germany, Finland, and Switzerland. Long-term talent visas in France declined by 7.9% in 2025, driven by a 15.9% drop in visas for salaried workers, including in tech. Chinese-trained talent has decreased as a share of the workforce across every major destination in the dataset. For the first time in the period covered by our analysis, more AI workers are moving from the US to Europe than the reverse.

Third, growth in the European AI workforce is not producing proportional growth in female representation. The average female share in the EU countries in our sample is 36.7% at tier 0, 24.9% at tier 1, and 20.9% at tier 2. In several countries, this gap is widening rather than closing. Germany's workforce parity gap increased from 19.2% to 23.3% in a single year. The Netherlands improved at tier 0 but saw the proportion of women in tier 1 fall from 28.0% to 24.6%. France's female share rose at tiers 1 and 2, but these gains coincide with a contracting international talent pool, which the paper notes may reflect a compositional effect rather than structural change.

Taken together, these findings suggest that workforce size, composition, and origin interact in ways that a single-dimension talent strategy is unlikely to address. France's experience indicates that gains in domestic training can coincide with declines in international attraction. Germany's experience indicates that ecosystem growth can coincide with a declining proportion of women in AI or AI-adjacent roles. The Netherlands' experience indicates that strong performance at the research frontier can coincide with weakening representation in the commercial middle of the workforce. Each

of these patterns is visible only when scale, origin, and gender are examined together. While the comparison for data comparison in this paper spans just over a year, it is likely that the findings may be signals of longer-term changes and trends, requiring close monitoring by policymakers and industry alike. On the evidence in this paper, Europe's competitive position in AI talent will depend less on any single lever than on whether these dimensions are treated as part of one coherent strategy.

Methodology

Data Sources

This paper draws on workforce intelligence data provided by Revelio Labs, which aggregates and structures publicly available professional profiles, job postings, and related sources into a comprehensive global workforce dataset. The September 2025 snapshot encompasses approximately 616 million individuals in the global workforce. From this population, we identified approximately 1.6 million individuals who constitute the global AI workforce based on our classification framework. Where year-on-year comparisons are presented, we use an April 2024 snapshot as the baseline, consistent with our previous publications.

Our analytical approach employs both absolute figures and per capita statistics, utilising World Bank population data for national and metropolitan area comparisons. Gender estimates are derived from Revelio Labs' census-based name prediction model, which checks each individual's first name against national census registries to estimate gender probability. Individuals are assigned a gender when the probability exceeds 50%; those without a predicted gender (approximately 2.1% in the EU data) are excluded from gender-specific analyses.

The 84 countries included in the analysis are: United States, India, United Kingdom, Canada, Germany, Australia, Italy, Netherlands, Singapore, Indonesia, Pakistan, Israel, Egypt, France, Brazil, Switzerland, United Arab Emirates, Spain, Malaysia, Saudi Arabia, Turkey, Iran, Ireland, South Korea, Sweden, Philippines, Bangladesh, Japan, Nigeria, Denmark, Taiwan, Hong Kong, South Africa, Belgium, Vietnam, Poland, Mexico, Portugal, Finland, Thailand, Kenya, Austria, Sri Lanka, Greece, Romania, New Zealand, Norway, Russia, Hungary, Argentina, Czech Republic, Jordan, Ukraine, Nepal, Serbia, Colombia, Lebanon, Ghana, Bulgaria, Qatar, Lithuania, Croatia, Morocco, Ethiopia, Luxembourg, Kazakhstan, Chile, Armenia, Cyprus, Costa Rica, Tunisia, Estonia, Azerbaijan, Slovenia, Peru, Oman, Slovakia, Uganda, Saint Vincent and the Grenadines, Georgia, Zimbabwe, Algeria, Iraq, and Kuwait.

Classification Framework

This paper applies the three-tier classification system introduced in interface's April 2025 study, *Technical Tiers: A New Classification Framework for Global AI Workforce Analysis*. The framework categorises AI talent into three levels based on their technical engagement with AI development:

- **Tier 0 (AI Literate):** Individuals in non-technical roles within the AI industry or those with demonstrated interest in AI but working in adjacent or unrelated fields. This includes professionals who engage with deep learning, data science, and machine learning concepts but do not currently work in roles that directly involve these areas.

- **Tier 1 (Software & Data Professionals):** Technical professionals working in software development or data science, who may employ foundational machine learning techniques such as linear regression in their work, but do not directly develop advanced AI systems. This tier includes data scientists who do not work with deep learning methods.

- **Tier 2 (AI Researchers & Engineers):** Individuals employed in roles that directly involve developing, applying, or researching deep learning techniques, including computer vision, generative models, and other advanced machine learning applications. This tier captures those working with neural network architectures such as transformers, RNNs, CNNs, and LSTMs.

Classification was performed using Llama 3.1 70B, an open-source large language model selected for its alignment with our transparency values, strong performance in benchmarking, and data sovereignty advantages. Each profile was processed independently through a specialised classification prompt optimised using DSPy, achieving 80% accuracy on a gold-standard test set of 100 manually classified profiles. Despite individual-level noise, aggregate trends around talent pool classification are robust and meet accuracy standards for analytical use. Chain-of-Thought prompting was employed to improve output quality and interpretability. For a full account of the classification methodology, prompt development process, and validation benchmarks, we refer readers to the *Technical Tiers* paper.

Estimating Talent Origins

To analyse the geographic origins of AI talent, we use the country of each individual's university degree as a proxy for their country of origin. This approach is grounded in the assumption that most individuals pursue early education in their home country. OECD data supports this: only approximately 8% of bachelor's degree students across OECD countries are international. However, meaningful exceptions exist. Countries like Australia and New Zealand see international university populations of up to 28%, likely driven by English-language instruction, while the UK (18%) and Austria (17%) also

attract significant shares. By contrast, the US hosts only 4% international undergraduate students and India less than 0.5%, making the proxy especially reliable for these major talent origin countries.

When interpreting year-on-year changes in talent origin composition, readers should consider that shifts may reflect changes in immigration flows, visa policy, or labour market conditions as well as changes in domestic education output. These dynamics are discussed in the relevant findings section.

Limitations

Several limitations should be considered when interpreting this analysis.

Platform and self-reporting bias. Revelio Labs' dataset is derived primarily from publicly available professional profiles. Individuals without such profiles, whether due to data protection preferences, limited digital access, or cultural norms around professional self-presentation, are not captured. While Revelio applies sampling weights to adjust for underrepresented roles and locations, the dataset is likely to overrepresent digitally engaged, white-collar professionals. This bias is partially mitigated by the nature of our study population: AI professionals generally possess the digital literacy and infrastructure to maintain professional profiles online.

Gender prediction. Gender is estimated using a binary model trained on census data for first-name distributions. This method is less reliable for uncommon or culturally ambiguous names and fails to capture the full spectrum of gender identities. We acknowledge this as a significant limitation.

Sample size variation. While we applied a minimum threshold of 1,000 individuals per country to ensure representativeness, sample sizes can vary more substantially when disaggregating by talent origin, tier, and gender simultaneously. Countries with stronger data protection norms may also have fewer publicly available profiles, potentially skewing sub-sample composition. These inconsistencies should be considered when interpreting cross-country comparisons based on educational origin or tier-gender intersections.

Data coverage for China. The dataset lacks comprehensive coverage of China due to limitations in the underlying data sources, which rely on professional profile platforms with lower penetration in the Chinese market. This is a data limitation, not an empirical finding about China's AI workforce. Independent research using alternative sources suggests that cities like Beijing and Shanghai have tech talent pools exceeding 500,000 individuals.

Classification accuracy. Our LLM-based classification achieves 80% accuracy, which is

within the acceptable range for complex multi-class NLP tasks but introduces a degree of noise at the individual level. Aggregate patterns at the country and tier level are more reliable than individual classifications. The overlapping nature of AI-adjacent professional skills means that some profiles near tier boundaries may be classified differently on repeated assessment.

Skill taxonomy gaps. Revelio Labs' skill taxonomy may not fully capture all specialised AI domains, such as AI hardware development or chip design, potentially underrepresenting professionals in those areas. As the field evolves and new specialisations emerge, periodic taxonomy updates will be important for maintaining comprehensive coverage.

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