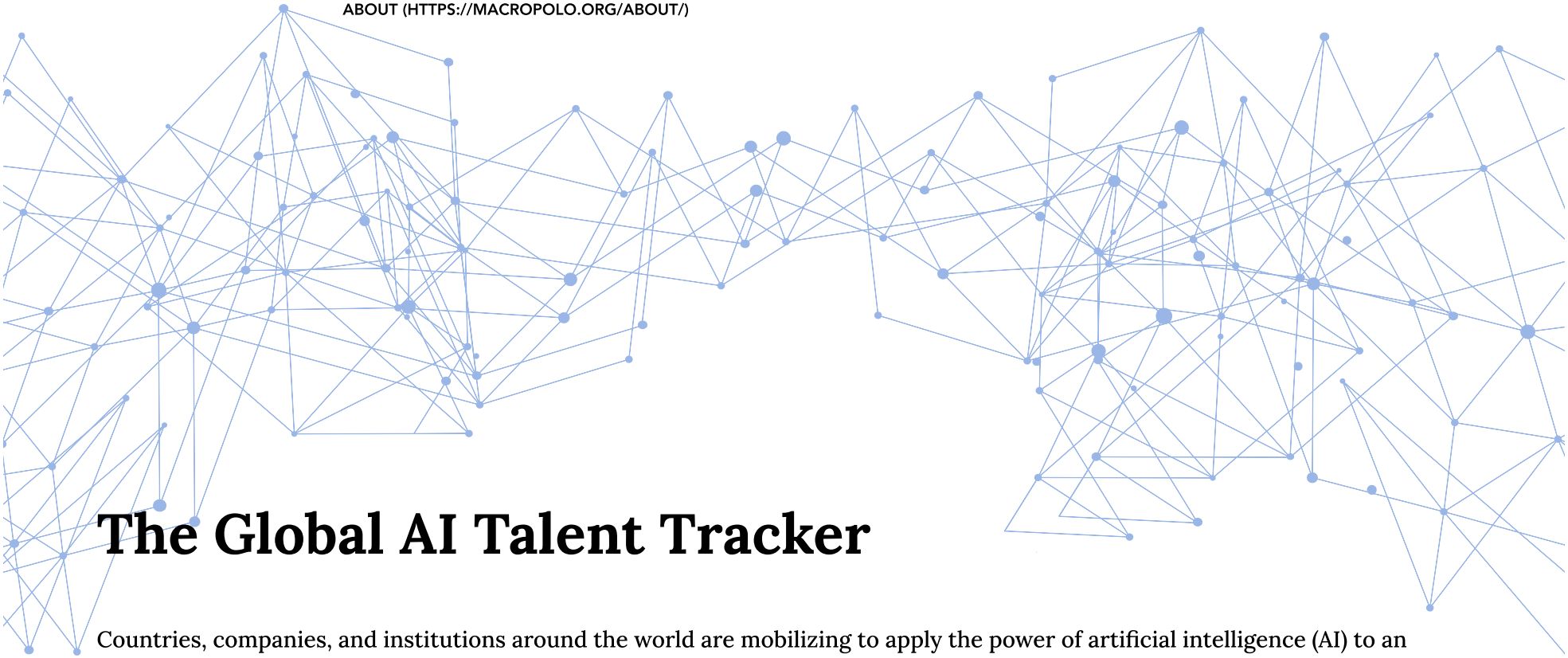


The Global AI Talent Tracker

Countries, companies, and institutions around the world are mobilizing to apply the power of artificial intelligence (AI) to an enormous range of economic and social problems. That application requires bringing together several key inputs: research and engineering talent, data, computational power, and a healthy innovation ecosystem. Talent is one of the most important—and the most clearly quantifiable—of those inputs.

To assess the global balance and flow of top AI scientists we focused on what many consider the top AI conference for deep learning: Neural Information Processing Systems, a.k.a. NeurIPS. For its December 2019 conference, NeurIPS saw a record-breaking 15,920 researchers submit 6,614 papers, with a paper acceptance rate of 21.6%, making it one of the largest, most popular, and most selective AI conferences on record.

We created a unique and rich dataset of researchers with papers accepted at NeurIPS 2019, using that as a proxy for the top-tier (approximately top 20%) of AI research talent (see detailed methodology (/methodology-for-global-ai-talent-tracker/)). We chose to focus on top-tier AI researchers because we believe this cohort is the most likely to lead the way on new areas of potentially

breakthrough research as well as to apply AI to highly complex real-world problems.

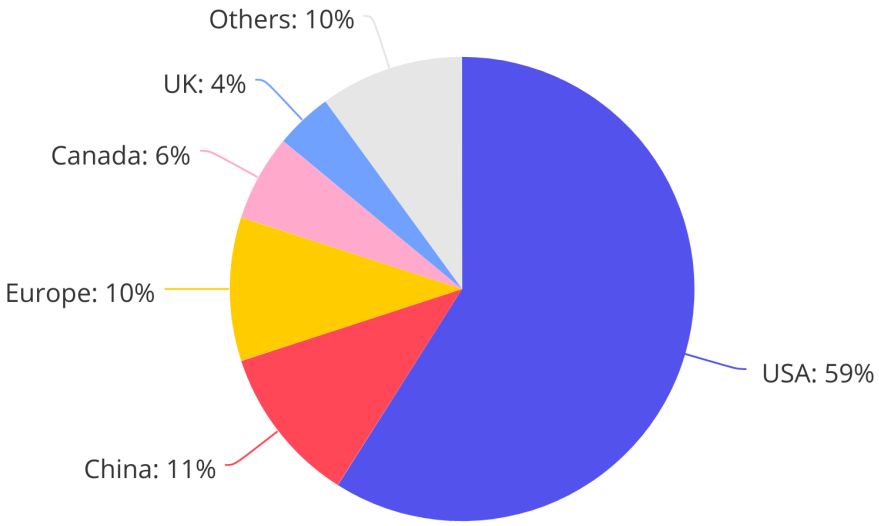
Explore the key takeaways and view the insights from the dataset below. For our analysis of the data and other charts, click here (https://macropolo.org/americas-got-ai-talent-us-big-lead-in-ai-research-is-built-on-importing-researchers).

Key Takeaways

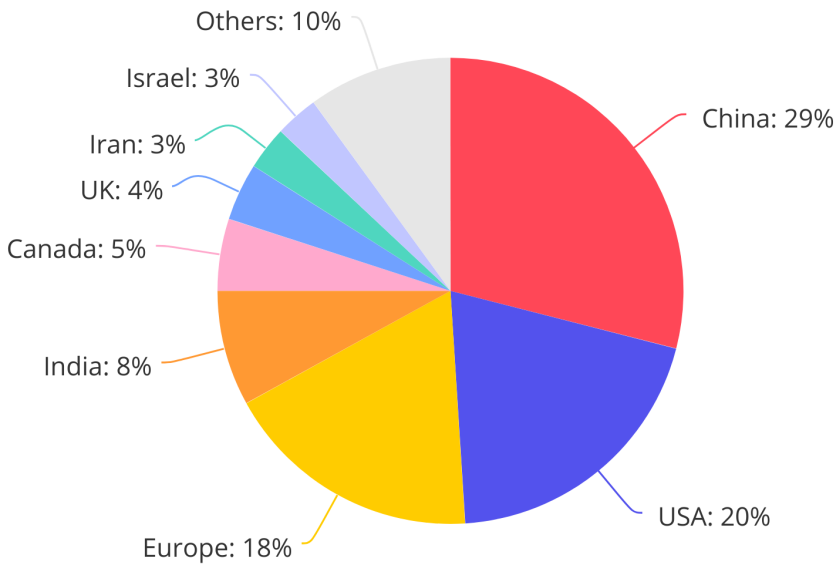
1. The United States has a large lead over all other countries in top-tier AI research, with nearly 60% of top-tier researchers working for American universities and companies. The US lead is built on attracting international talent, with more than two-thirds of the top-tier AI researchers working in the United States having received undergraduate degrees in other countries.
2. China is the largest source of top-tier researchers, with 29% of these researchers having received undergraduate degrees in China. But the majority of those Chinese researchers (56%) go on to study, work, and live in the United States.
3. Over half (53%) of all the top-tier AI researchers are immigrants or foreign nationals currently working in a different country from where they received their undergraduate degrees.

Where do top-tier AI researchers work today?

Where do top-tier AI researchers come from?



Country affiliations are based on the headquarters of institutions in which the researchers currently work.



Country affiliations are based on the country where the researcher received their undergraduate degree.

What are the career paths of top-tier AI researchers?

Explore the movements of top-tier AI researchers from undergraduate to graduate school to where they work today. Click on the country blocks to see the flows into and out of each block, and hover over the paths to see that path's share of the total. See the note below for details.

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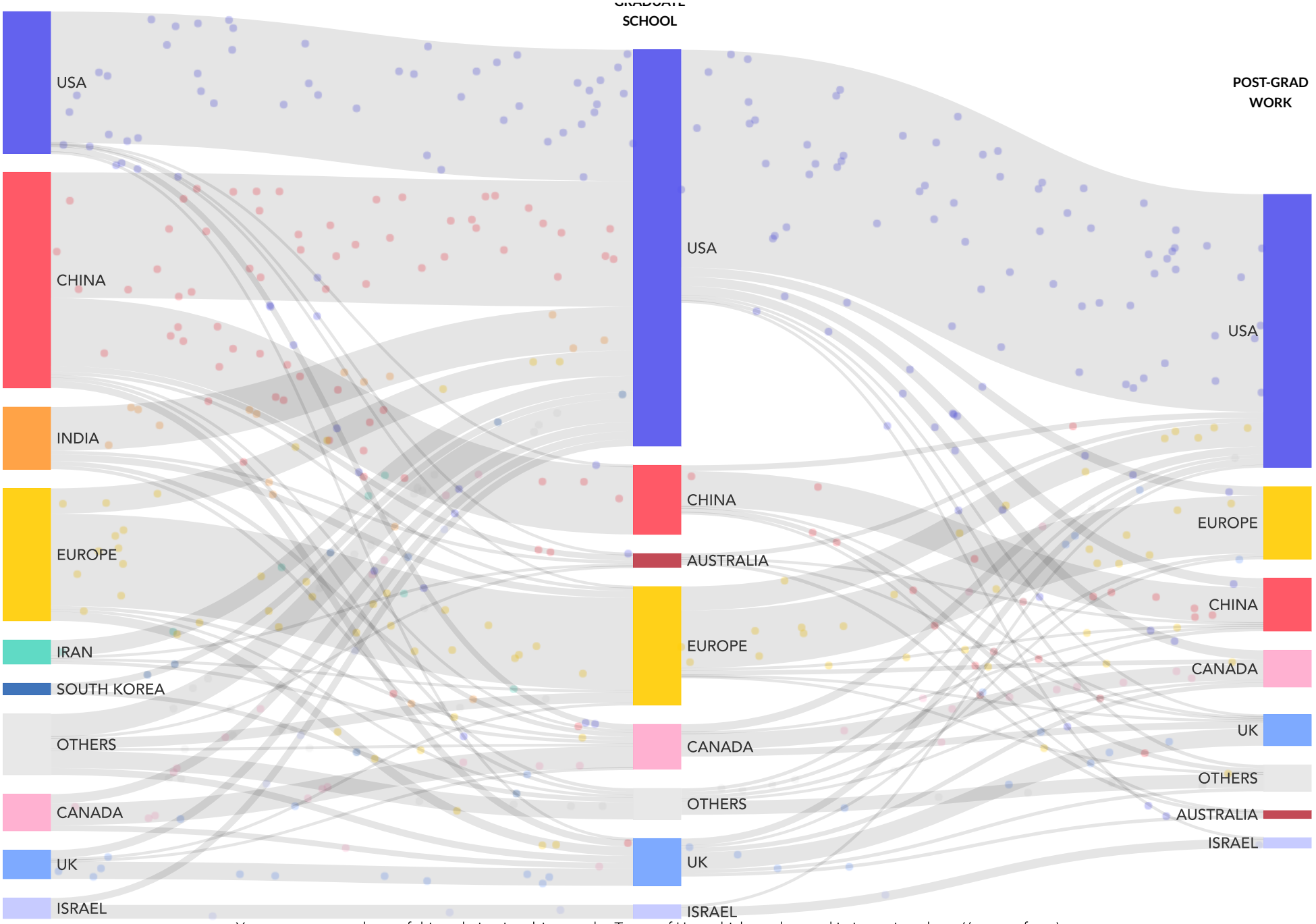
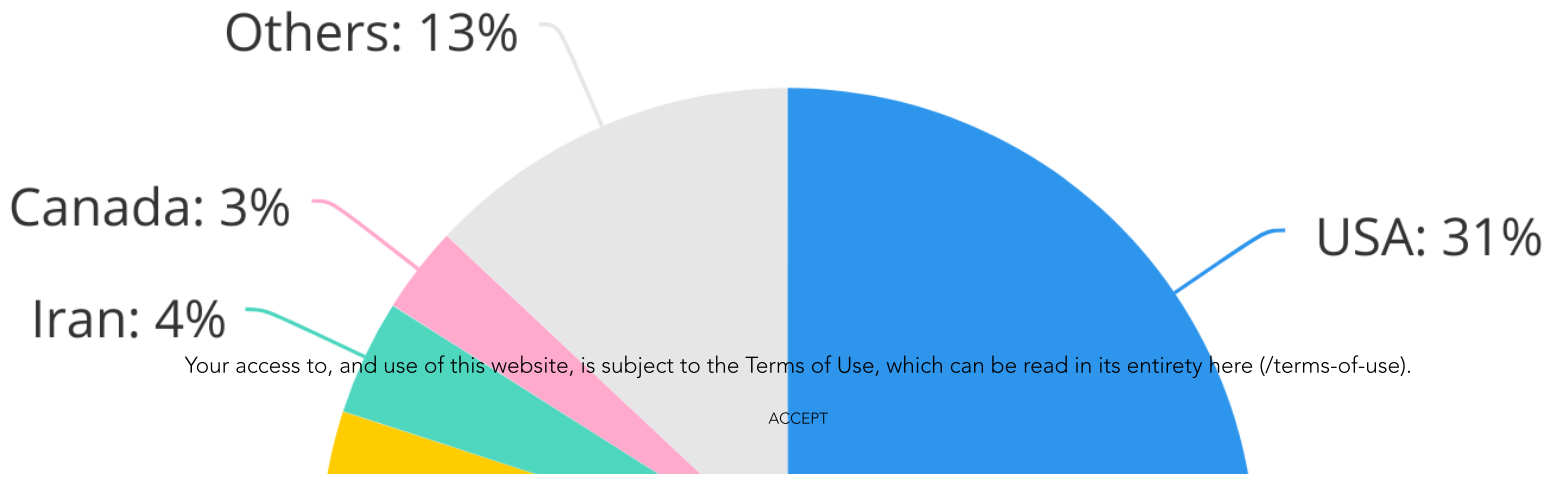


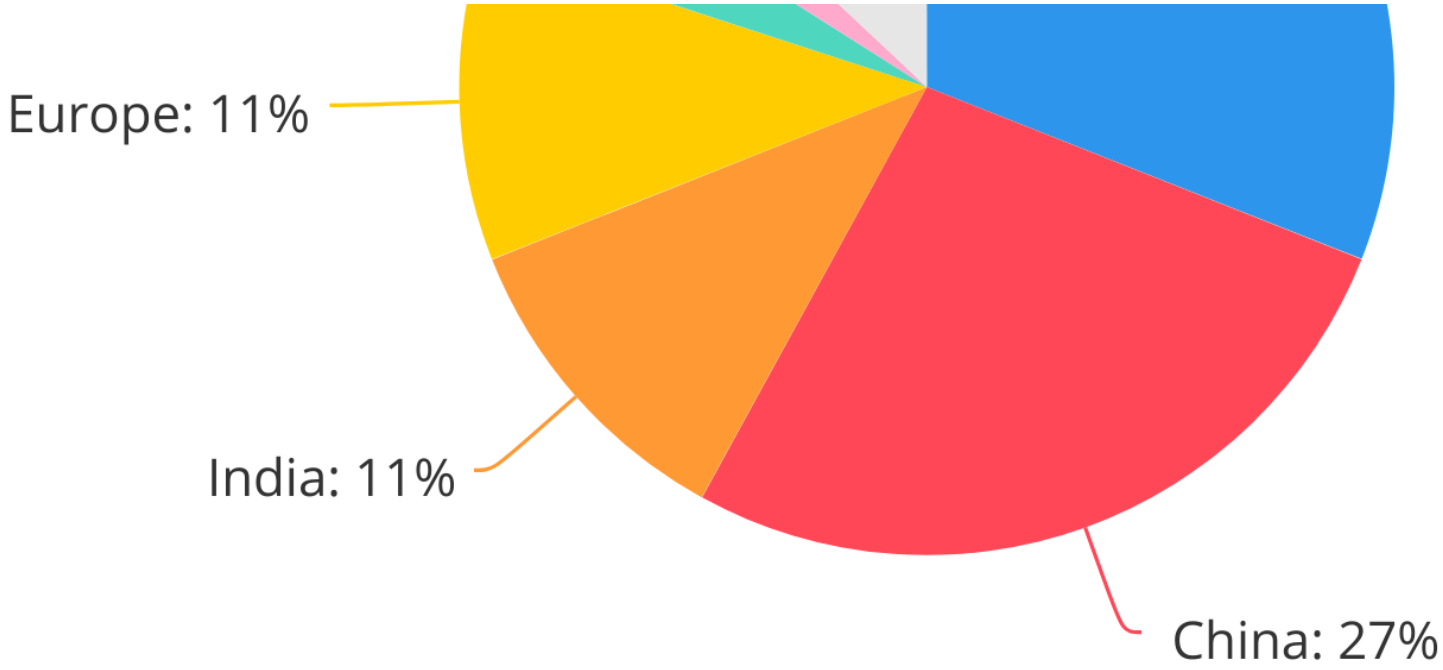
All data is from a sample of authors of papers accepted at NeurIPS 2019. Country affiliations are based on the geographic location of the researcher, not their institution's headquarters. For "Graduate School" column, all current and former graduate students are included. For "Post-Grad Work" column, only researchers who have completed their graduate studies are included. Creating this chart required excluding a small number of researchers for whom complete data was not available. Where there are differences in the percentages listed here from other statistics in the report, that exclusion is the reason.

Spin-off Questions

All data for the following figures are based on top-tier AI researchers with papers accepted at NeurIPS 2019.

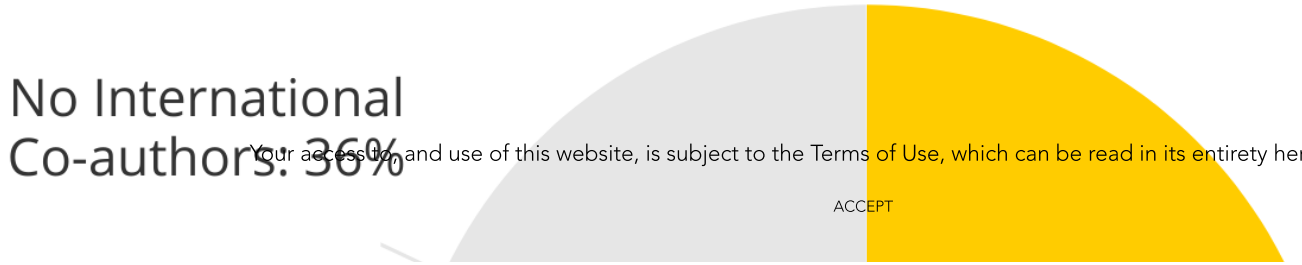
Where do AI researchers working for US institutions come from?

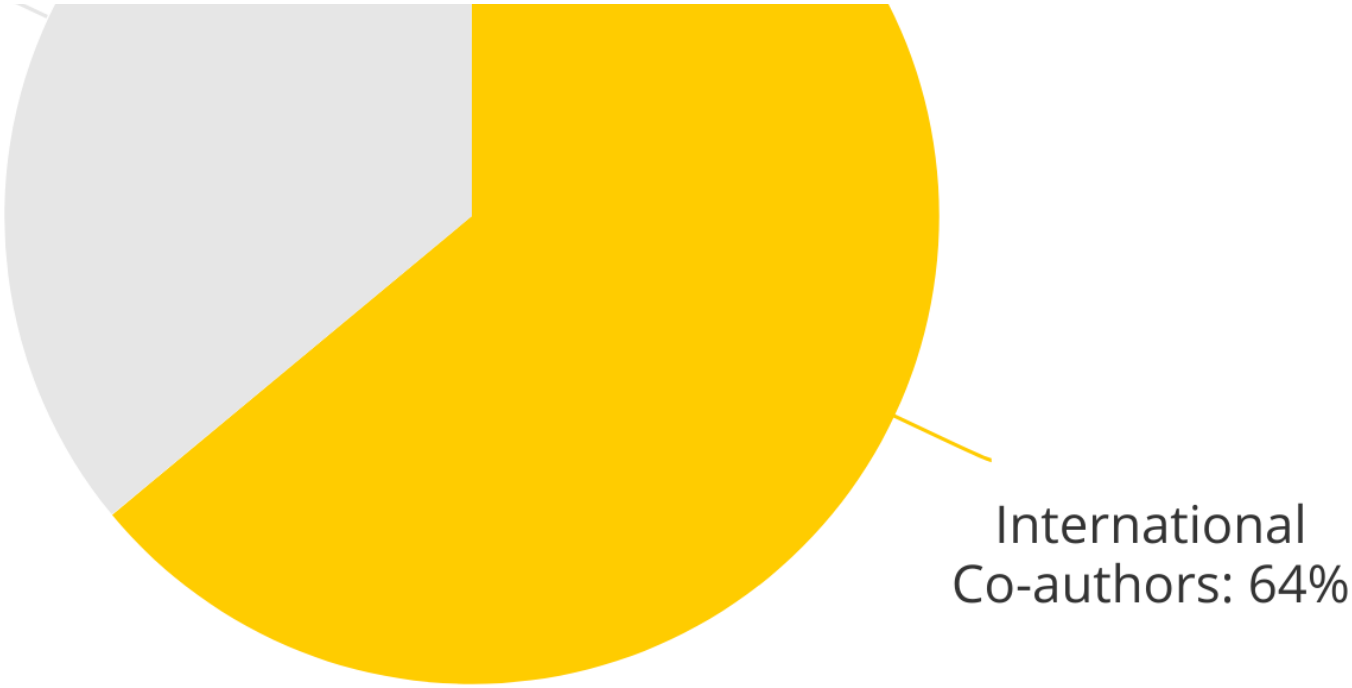




Country affiliations are based on where the researchers received undergraduate degrees.

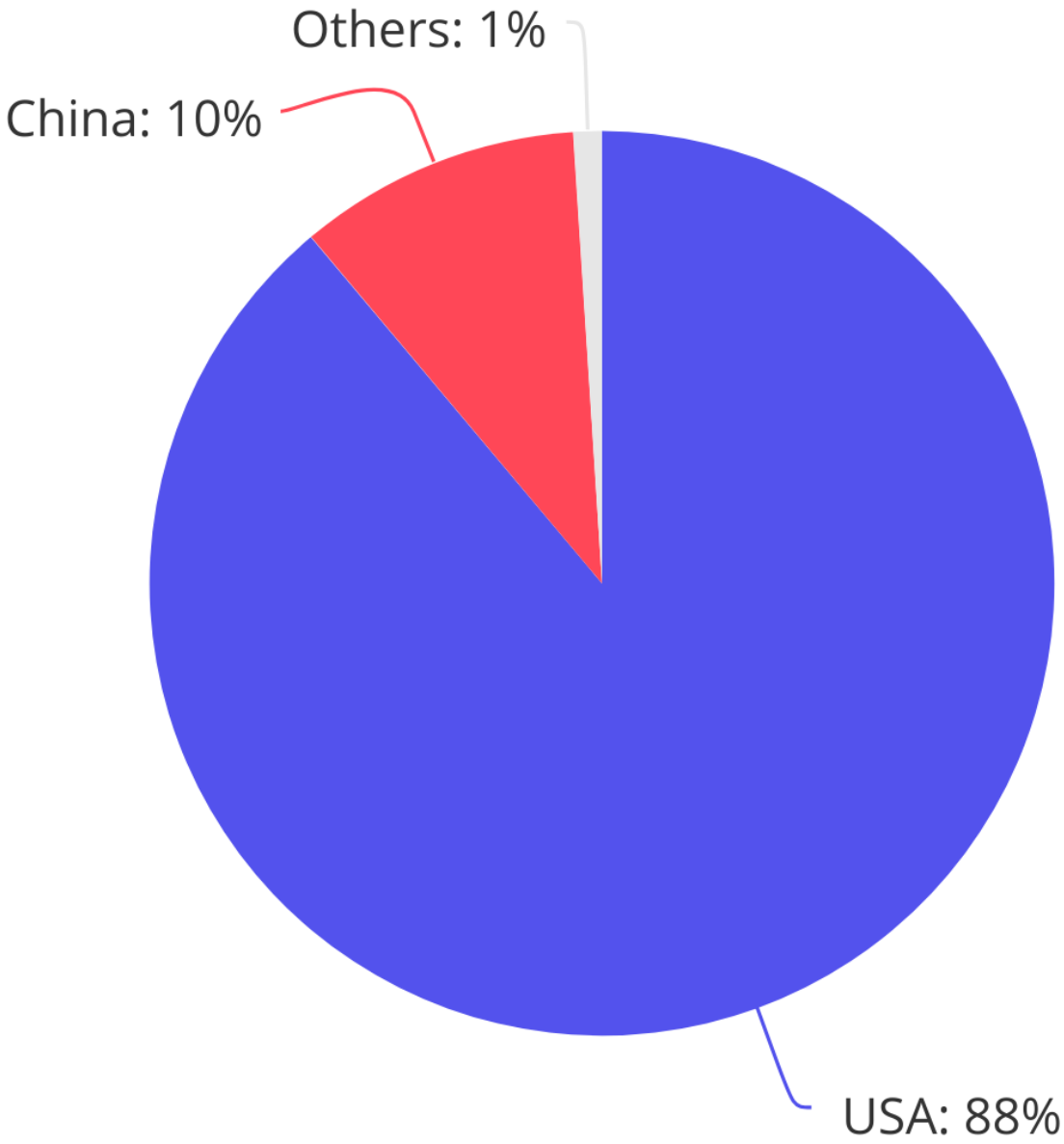
What portion of top-tier AI research papers have co-authors who come from different countries?





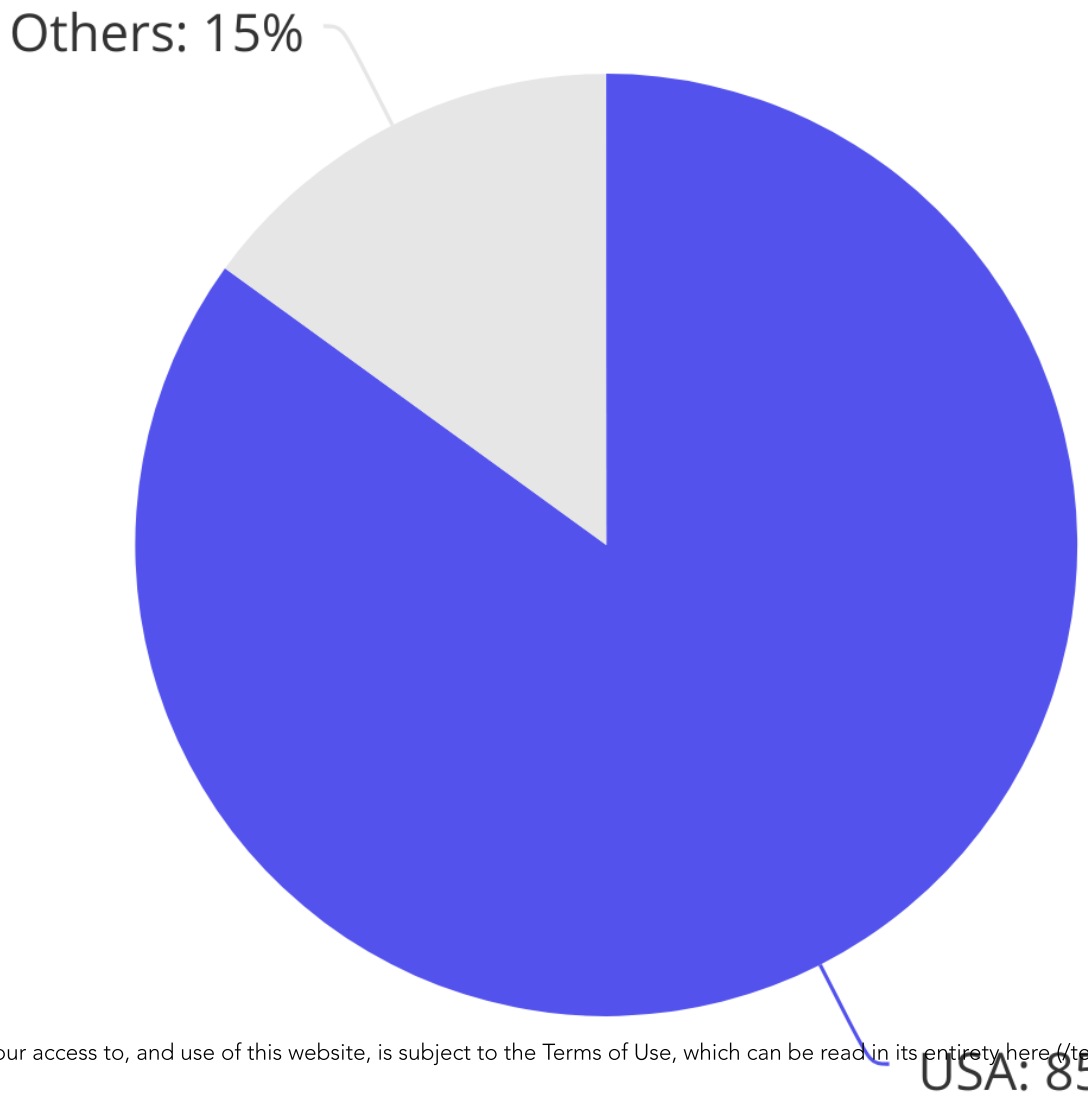
Country affiliations are based on where the researchers received their undergraduate degrees.

Where do Chinese AI PhD students work after completing graduate school in the United States?



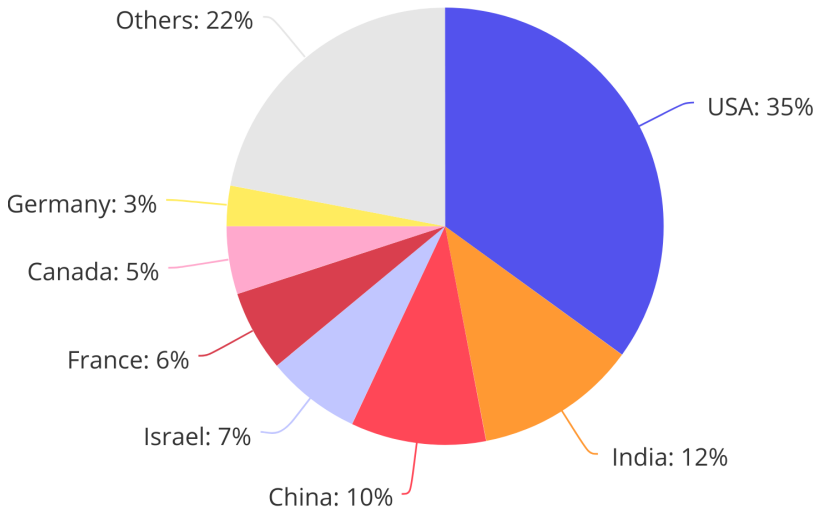
Country affiliation is based on geographic location of the researchers. Percentages for "China" and "Others" are based on smaller counts compared to other questions in the study.

Where do non-Chinese international AI PhD students work after completing graduate school in the United States?



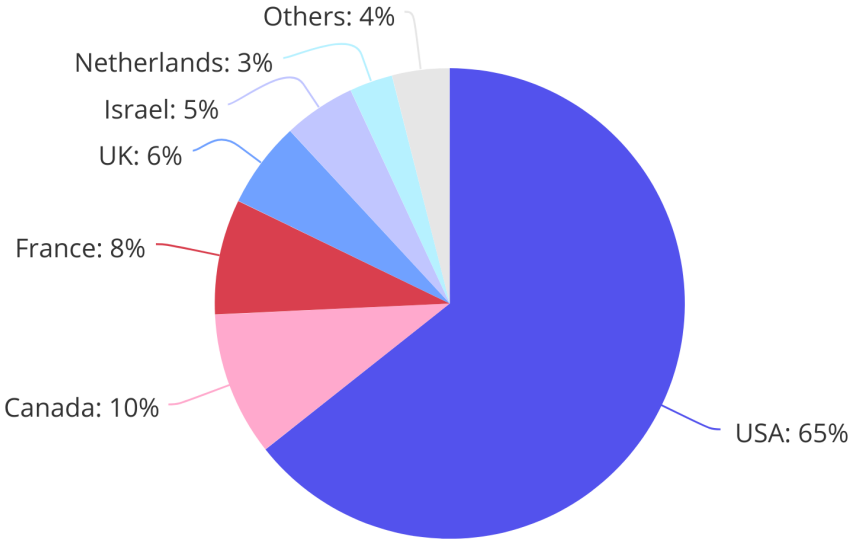
Country affiliation is based on the geographic location of the researchers.

Where did the most elite (top 0.5%) AI researchers receive their undergraduate degrees?



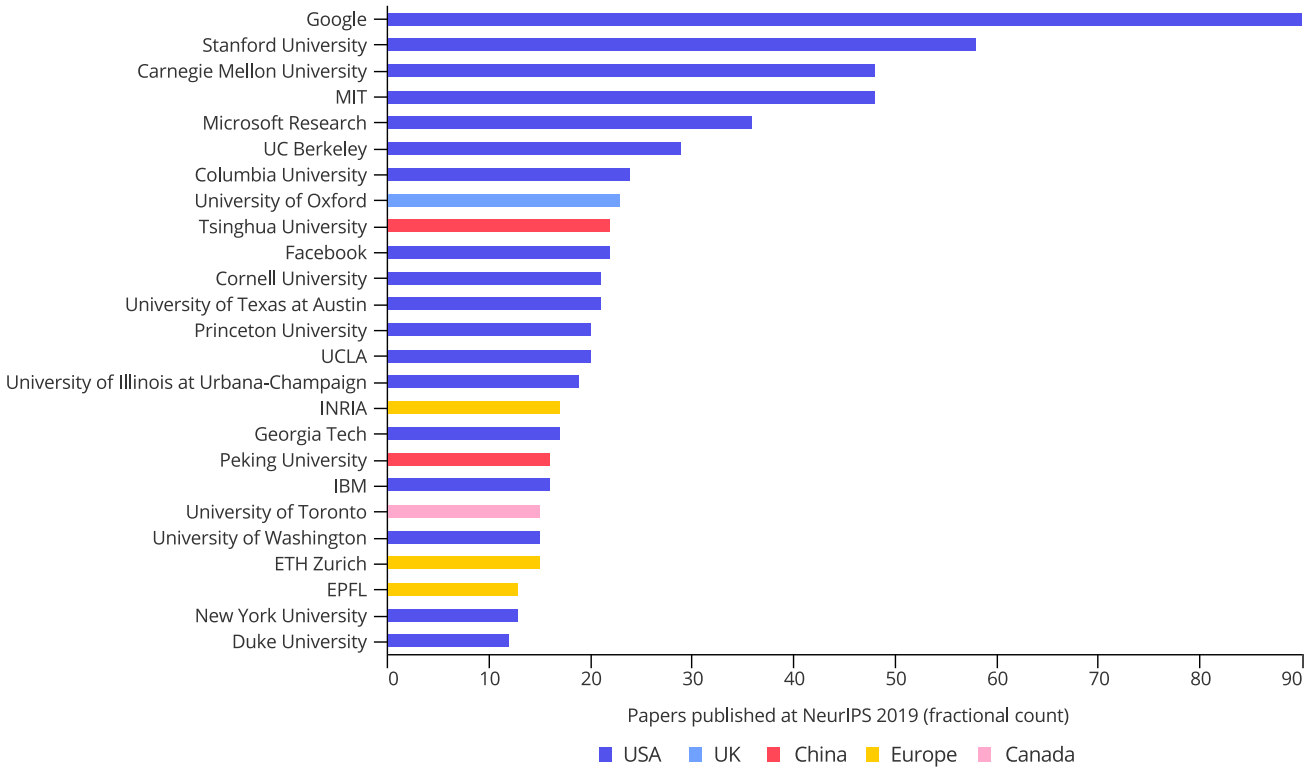
Data from authors of papers selected for Oral Presentations at NeurIPS 2019. Oral Presentations represent the most prestigious class of papers at NeurIPS, with an acceptance rate of 0.5% in 2019. Country affiliations are based on where the researchers received undergraduate degrees.

Where do the most elite (top 0.5%) AI researchers work today?



Data from authors of papers selected for Oral Presentations at NeurIPS 2019. Oral Presentations represent the most prestigious class of papers at NeurIPS, with an acceptance rate of 0.5% in 2019. Country affiliations are based on the geographic location of researchers, not their institution's headquarters.

The Top 25 Institutions for Top-Tier AI Research:



For institutions with multiple branches or subdivisions, publications have been aggregated under the parent institution (e.g. papers by Google, Google Brain, and DeepMind are all credited to Google.) For a full explanation of fractional count, see the detailed methodology (/methodology-for-global-ai-talent-tracker/).

Dig Deeper

The State of European AI Talent

(https://macropolo.org/digital-projects/the-global-ai-talent-tracker/the-state-of-european-ai-talent/)

Asian AI Researchers (https://macropolo.org/digital-projects/the-global-ai-talent-tracker/asian-ai-researchers/)

International Collaboration (https://macropolo.org/digital-projects/the-global-ai-talent-tracker/international-collaboration/)

Methodology for Global AI Talent Tracker (https://macropolo.org/digital-projects/the-global-ai-talent-tracker/methodology-for-global-ai-talent-tracker/)