

# Neural networks

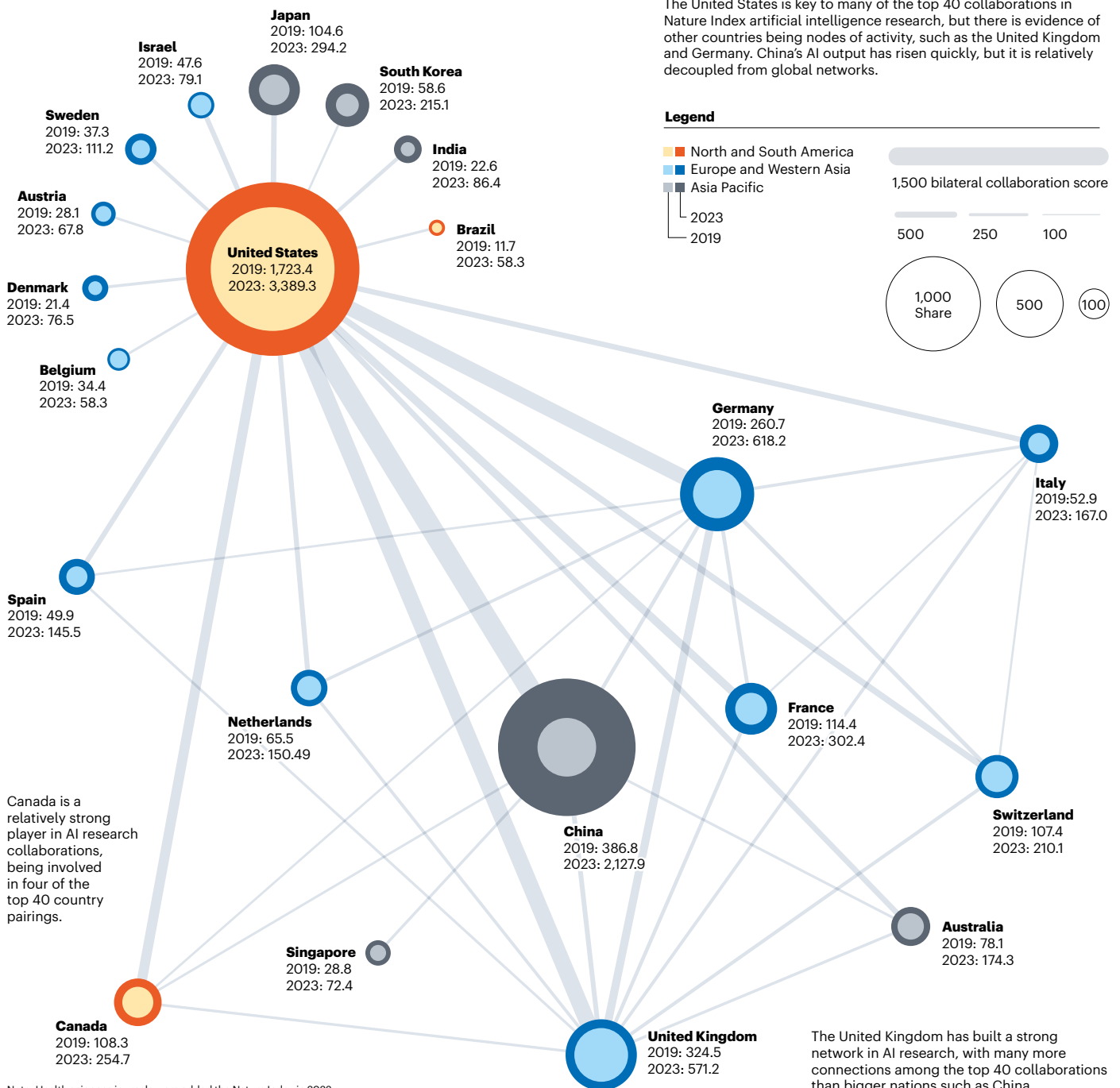
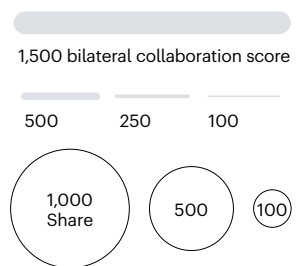
Only a fraction of global research on artificial intelligence appears in Nature Index journals, but the patterns of international collaboration are still clear. **Data analysis by Aayush Kagathra. Data visualization by Simon Baker and Tanner Maxwell.**

## KNOWLEDGE WEB

The United States is key to many of the top 40 collaborations in Nature Index artificial intelligence research, but there is evidence of other countries being nodes of activity, such as the United Kingdom and Germany. China's AI output has risen quickly, but it is relatively decoupled from global networks.

### Legend

- North and South America
  - Europe and Western Asia
  - Asia Pacific
- 2023  
— 2019



Canada is a relatively strong player in AI research collaborations, being involved in four of the top 40 country pairings.

The United Kingdom has built a strong network in AI research, with many more connections among the top 40 collaborations than bigger nations such as China.

Note: Health sciences journals were added to the Nature Index in 2022.