

Summary of Spotlight on Beijing Institute for General Artificial Intelligence

China has a state-backed institute dedicated to building “artificial general intelligence” (AGI), i.e., software that emulates or exceeds human cognitive ability on most tasks.

- Created in late 2020, the Beijing Institute for General Artificial Intelligence (BIGAI) is unique among Chinese AI labs in its open embrace of artificial general intelligence (AGI) as its sole mission.
- As work there progresses, materials are becoming available that provide insight into BIGAI’s goals, scope, organization, methodology, and staffing.
- BIGAI director Zhu Songchun, in declarations to state bodies, has likened the project to China’s “two bombs, one satellite” programs in terms of strategic importance.

BIGAI has a physical plant for a staff of 1,000, drawn from China’s top universities, global “talent,” and elite students trained in AGI precursor technologies.

- The institute is amalgamated operationally with Peking and Tsinghua Universities’ AI and AGI research centers, and with other capital area institutes.
- Director Zhu is a celebrated returned “strategic scientist” whose prior work at UCLA on computer vision shaped his beliefs on the need and means to build AGI.
- The organization has recruited some 30 top scientists educated at leading U.S. and UK research universities, several of whom were trained under U.S. government programs.
- While drawing on international “talent,” BIGAI is a Chinese enterprise in spirit and approach, and is regarded by its sponsors as a key element in global competition.

BIGAI’s “small data, big task” paradigm complements other Chinese AGI projects based on machine learning, cognitive science, and neuroscience.

- Zhu’s contrarian approach, born of personal experience, rejects traditional big data (large language) models as methodologically misguided and economically infeasible.
- BIGAI aims to infuse AI with “common sense” that aligns with a human understanding of the physical world and rules for living in it.
- The move in principle puts China on the same footing with the United States and the United Kingdom—where commercial enterprises also are working toward AGI—raising concerns about AI safety and national security.