CSET CENTER for SECURITY and EMERGING TECHNOLOGY

Summary of "China's Cognitive AI Research: Emulating Human Cognition on the Way to General Purpose AI"

China's public claim to be building artificial general intelligence (AGI)—long-regarded as AI's "holy grail"—is evidenced factually in scientific publications.

- Analysis of China's peer-reviewed AI research validates prior assessments that China is moving toward broadly capable AI as a matter of state policy.
- China's AI research seeks to replicate features of human cognition such as reasoning, creativity, common sense, and awareness, along with affect and motivation.
- The quest for AGI is taken seriously by a broad segment of credible Chinese scholars working under a mandate to achieve a "first mover advantage."

The present study, based on hundreds of Chinese and English language papers, lays out a methodology for open-source scientific exposition across multiple domains.

- The study demonstrates the value, techniques, and challenges of open-source intelligence (OSINT) against "hard targets" in non-English languages.
- Although the study focuses on one topic only—Chinese AI research aimed at human cognitive skills ("brain inspired AI")—the procedures used are extensible.
- Non-proprietary data gathered during the study, useful for tracking China's AI progress and downstream research, are available to share with appropriate partners.
- Although foreign support is important to China's AI programs, it is not the main driver. Chinese science must be evaluated on its own terms through a vetted methodology.

China's push toward AGI challenges global initiatives for AI governance, putting a premium on the ability to monitor Chinese programs.

- Trust-based agreements to regulate global AI development depend on open access to scientific literature; absent such access, these agreements are sterile.
- The United States and its allies still lack the means to gather information at the level of detail needed to support rational decisions on AI outreach and mitigation.
- The present study is a "one-shot" local effort—a model to demonstrate the feasibility of tracking AI progress—in search of sustained institutional sponsorship.

For more information:

- Download the report