

27th Anniversary



The Millennium Project Planning Committee Meeting



25-26 November, 2023



Dubai Future Foundation

Emirate Towers area 2071 main room Dubai, U.A.E.

The Millennium Project's AGI Global Governance Study



- 1. Reviewed other's research, conferences, podcasts, other Internet sources
- 2. Created 22 AGI-related questions
- 3. Interviewed about 25 AGI thought leaders and documented another 30.
- 4. Produced Phase 1 Report (now available)
- 5. Real-Time Delphi questionnaire AGI governance elements (current)
- 6. Produce Phase 2 report
- 7. Test several governance models in alternative detailed scenarios
- 8. Produce Phase 3 report
- 9. Global distribution to participants, conferences, UN, and parliaments

55 AGI 'Experts' and Thought Leaders Given 22 Questions

Sam Altman, via YouTube and OpenAl Blog, CEO OpenAl

Anonymous, AGI Existential Risk OECD (ret.)

Yoshua Bengio. University of Montreal

Irakli Beridze, UN Interregional Crime and Justice Res. Ins. Ct. for Al and Robotics

Nick Bostrom, Future of Humanity Institute at Oxford University

Gregg Brockman, OpenAl co-founder

Vint Cerf, Internet Evangelist, V.P. Google.

Shaoqun CHEN, CEO of Shenzhen Zhongnong Net Company

Anonymous, at Jing Dong Al Research Institute, China

Pedro Domingos, University of Washington

Dan Faggella, Emerj Artificial Intelligence Research

Lex Fridman, MIT and Podcast host

Bill Gates

Ben Goertzel, CEO SingularityNet

Yuval Noah Harari, Hebrew University, Israel

Tristan Harris, Center for Humane Technology

Demis Hassabis, CEO and co-founder of DeepMind

Geoffrey Hinton, Al pioneer, Google (ret)

Lambert Hogenhout, Chief Data, Analytics and Emerging Technologies, UN Secretariat

Erik Horvitz, Chief Scientific Officer, Microsoft

 ${\bf Anonymous, Information \, Technology \, Hundred \, People \, Association, \, China}$

Anonymous, China Institute of Contemporary International Relations

Andrej Karpathy, Open AI, former AI S Researcher Tesla

David Kelley, AGI Lab

Dafne Koller, Stanford University, Coursera

Ray Kurzweil, Director of Engineering Machine Learning, Google

Connor Leahy, CEO Conjecture

Yann LeCun, Professor New York University, Chief Scientist for Meta

Shane Legg, co-founder of DeepMind

Fei Fei Li, Stanford University, Human Centered Al

Erwu Liu, Tongji University AI and Blockchain Intelligence Laboratory

Gary Marcus, NYU professor emeritus

Dale Moore, US Dept of Defense AI consultant

Emad Mostaque, CEO of Stability.ai

Elon Musk

Gabriel Mukobi, PhD student Stanford University

Anonymous, National Research University Higher School of Economics

Judea Pearl, Professor UCLA

Sundar Pichai, Google CEO

Francesca Rossi, Pres. of AAAI, IBM Fellow and IBM's AI Ethics Global Leader

Anonymous, Russian Academy of Science

Stuart Russell, UC Berkeley

Karl Schroeder, Science Fiction Author

Bart Selman, Cornel University

Juan Del Ser, Tecnalia, Spain

David Shapiro, AGI Alignment Consultant

Yesha Sivan, Founder and CEO of i8 Ventures

Ilya Sutstkever, Open AI co-founder

Jaan Tallinn, Ct. Study of Existential Risk at Cambridge Univ., and Future of Life Institute

 ${\it Max Tegmark, Future of Life Institute and MIT}$

Peter Voss, CEO and Chief Scientist at Aigo.ai

Paul Werbos, National Science Foundation (ret.)

Stephen Wolfram, Wolfram Alpha, Wolfram Language

Yudong Yang, Alibaba's DAMO Research Institute

Eliezer Yudkowsky Machine Intelligence Research Institute

Some examples of the 22 questions



- 1. What are some key initial conditions for AGI so that an artificial super intelligence does not emerge later that is not to humanity's liking?
- 2. How can alignment be achieved? If you think it is not possible, then what is the best way to manage this situation?
- 3. What options or models are there for global governance of AGI?
- 4. How can governance be flexible enough to respond to new issues previously unknown at the time of creating that governance system?
- 5. What enforcement powers will be needed to make the UN Agency effective?

Examples of global AGI governance models



- 1. IAEA-like model or WTO-like with enforcement powers. These are the easiest to understand, but likely to be too static to manage AGI.
- Create two divisions in a UN AI Agency: one for artificial narrow intelligence including frontier models and a second division just for AGI.
- 3. A multi-stakeholder body (TransInstitution) in partnership with a system of artificial narrow intelligences, each ANI to implement specific functions/requirements continually feeding back to the humans in the multistakeholder body and national AGI governance agencies.
- 4. International S&T Organization (ISTO) as an online real-time global collective intelligence system; governance by information power. This would be useful to help select and use an AGI system, but no proof that information power would be sufficient to govern the evolution of AGI.
- 5. Put all the most powerful AI training chips and AI inference chips into a limited number of computing centers under international supervision, with a treaty granting symmetric access rights to all countries party to that treaty.(Suggested by Eliezer Yudkowsky)
- 6. Decentralized emergence of AGI that no one owns (like no one owns the Internet) through the interactions of many AI organizations and developers like Singularity Net. (https://singularitynet.io)

We may rush into creating AGI without making sure its rules, guardrails are "right."



Examples of some potential "right" initial conditions, rules, and guardrails:

- National licensing systems connected to UN AI Agency for certification.
- Aliened with UNESCO, OECD, GAPI values and Asimov's three laws of robotics.
- Prior to UN certification of a national license, the AGI developer must prove safety as part of the initial audit via simulations to test AGI's alignment with these values.
- Continuous real-time audit software built in the AGI that can turn off the AGI when not aligned with values or goes beyond guardrails.
- Cannot turn off its own off switch.
- Al generated content must show its source (watermark, etc.)
- Require developers and users to keep a log of the AGI use like a flight recorder with the ability to recreate a decision and factors included in the decision.
- Be self-reflective, compassionate, truth-seeking, and love of humanity.