

Stanford



Anka Reuel

Ph.D. Student in Computer Science, admitted Autumn 2022

Bio

BIO

Anka Reuel is a CS Ph.D. student at the Stanford Intelligent Systems Laboratory, advised by Prof. Mykel Kochenderfer. Her work focuses on operationalizing responsible AI (RAI). She is designing a comprehensive framework for organizations to assess their RAI efforts across technical as well as governance dimensions, including, e.g., fairness, interpretability, robustness, and corporate strategy. Her goal is to help organizations understand the complex RAI landscape and enable them to develop and deploy socially beneficial AI systems. Anka is further involved in AI governance efforts. Most recently, she published an op-ed in *The Economist* with Gary Marcus, calling for international coordination on AI governance. She also worked jointly with a team at the University of Oxford to publish the first paper on a detailed framework for international AI governance. Anka also worked with members of the Center for the Governance of AI on design considerations for AI ethics boards to reduce risks from AI systems. She is further an advocate for more collaboration between the field of technical AI safety and AI governance and is a founding member of KIRA, an independent German think tank advocating for more collaboration in the field of responsible AI. Anka is a Research Affiliate with the Carnegie Council for Ethics in International Affairs and an incoming Stanford HAI Graduate Fellow.

Anka was a Fellow at the German National Academic Foundation, the Hans-Weisser-Stiftung, and the German Academic Exchange Program, and has won multiple awards for her work, including UPenn's Outstanding Academic Award 2022 and the Top Talents Under 25 Award. Anka is a first-generation, low-income student and a careleaver. To date, she keeps advocating in various roles to improve the conditions and opportunities for both of these groups. In her spare time, she is an avid traveler: Anka has visited 52 countries and lived in ten of them. She is also a casual ultimate frisbee player.

EDUCATION AND CERTIFICATIONS

- MSE, University of Pennsylvania , Computer Science (2022)
- MSc, London School of Economics , Management & Strategy (2016)
- BSc, University of Hagen , Economic Sciences (2015)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Inspired by the potential of intelligent technologies to improve lives, Anka began her M.S. in Computer Science at UPenn in 2020. She took the course CIS 522 'Deep Learning', which repeatedly raised the question of how developers can design more ethical algorithms. Interested in how the industry approaches the topic, she reached out to former colleagues and contacts, asking about how their companies manage the ethical implications of AI. Surprisingly, no one had an answer. They weren't managing adverse outcomes because they didn't know how. The problem was confirmed when she dived into research on the topic: Compared to the technical advancements in AI, the area of technical AI ethics was significantly understudied. Novel, complex autonomous systems were being developed without devoting

enough time to their potential negative implications and how they can be mitigated. Given the increasing use of such systems throughout society, this discrepancy sparked her interest in contributing to research in responsible AI.

After working on technical projects on responsible AI, including using adaptive stress testing to avoid ethical dilemmas in autonomous decision-making, she also engaged with decision-makers on the AI governance side. These encounters expanded her research interests to not only making AI more ethical from a technical perspective but also designing effective AI governance interventions and ensuring that people without a technical background understand the technology and its implications better.