The Hybrid Mind: Address the Ethics of Brain-Al Integration via Neural Interfaces

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Abstract:

The rapid convergence of neurotechnology and artificial intelligence is reshaping the landscape of neural interfaces. This talk will explore the ethical implications of these advances, focusing on how neurotech and AI can be integrated responsibly, without compromising human autonomy, cognitive liberty, and mental privacy. In particular, I will examine key issues such as data governance, mental privacy, potential manipulation of mental states, and the role of ethical AI design in preserving human agency in neurohybrid systems. Drawing on insights from neuroethics and AI ethics, this discussion aims to foster a critical dialogue on the future of neuro-augmented cognition.

Biographical information:

lenca studied philosophy and cognitive science at the University of Rome, Humboldt-Universität zu Berlin, New York University and KU Leuven. In 2018, he completed his PhD in biomedical ethics at the University of Basel with summa cum laude honors. He then worked as a postdoc and senior researcher at ETH Zurich. In 2021, he was a visiting scholar at the University of Oxford and founded the Intelligent Systems Ethics Group at EPFL. In 2023, Dr.lenca was appointed to the professorship for Ethics of AI & Neuroscience at TUM. lenca conducts research on the ethically sustainable development of AI systems and neurotechnologies. He uses theoretical and empirical methods to investigate the ethical, social and political implications of these technologies focusing on topics such as the brain-machine interface, the relationship between AI and human cognition, and the ethical processing of Big Data. He is known for his pioneering work on neurorights. He is the Neuroethics Lead of the International Brain Initiative and an expert advisor to the UN.