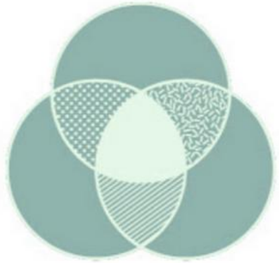
NEUROTECH CAREERS



Niche

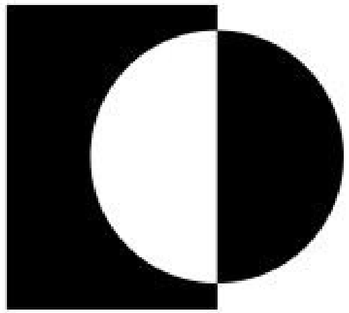
Growth Potential

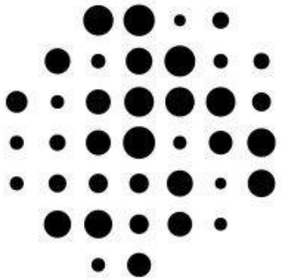
Impact

Without numbers and graphs

BCI Industry

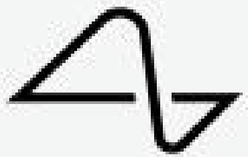
NEURABLE





NEURABLE

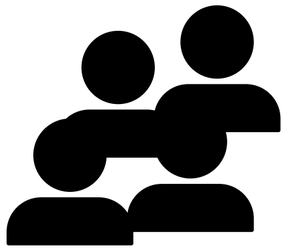
vs



VS

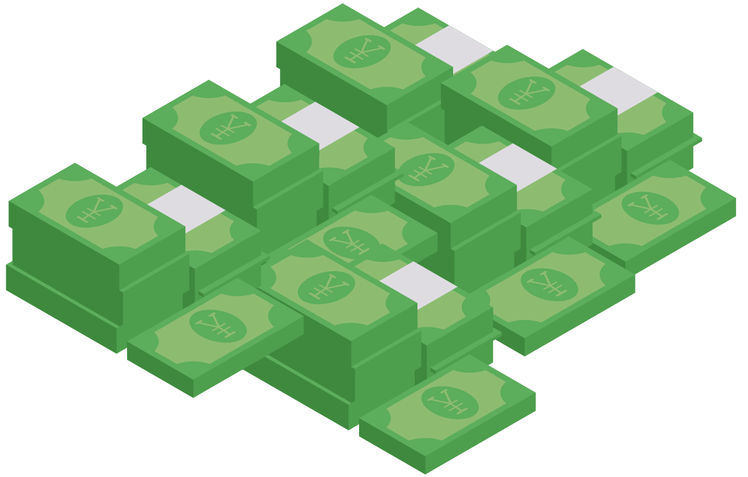
VS

VS

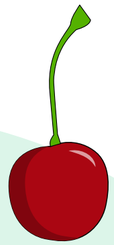


VS

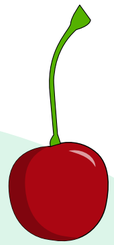
VS



Fundamental Research



Fundamental Research



Fast innovation for industry

Fundamental Research

Academia

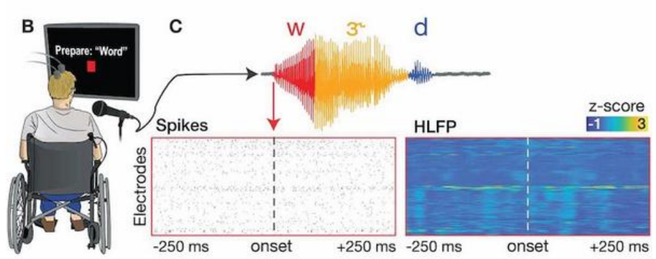




- Fundamental Research
  - Neuroscience
  - Psychology
  - Electrical Engineering
  - Bioengineering
- Startups
  - PhD students
  - Entrepreneurship mindset

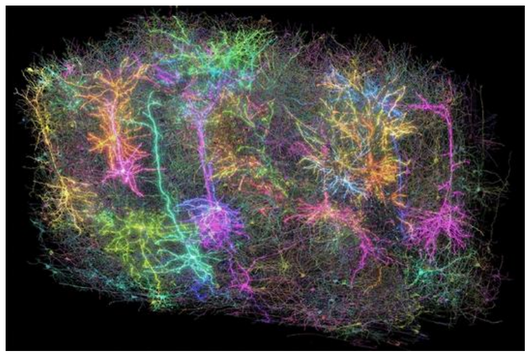
Research Centers

BRAINGATE
TURNING THOUGHT INTO ACTION



- Brain-computer interfaces
  - Decode neural signals
  - Translate to movement or speech
- Partner institutions
  - Joint interdisciplinary effort

ALLEN INSTITUTE *for*
BRAIN SCIENCE



- Standardized experimental pipeline
  - Reproducible research
- Data sharing
  - Faster turnaround

Government

Lawrence Livermore National Laboratory

- Brain-on-a-chip
  - In vitro recording of neurons
  - Compared to drug response of rodents

Computational Memory Lab
University of Pennsylvania

- Award neurotechnology grants to universities and partners
- Restoring Active Memory (RAM)
  - Create and restore memories
  - Traumatic brain injury

What would you choose?

Government

Academia

Industry

Research Centers

Alternatives

Regulatory Policies

unesco

DRAFT RECOMMENDATION ON THE ETHICS OF NEUROTECHNOLOGY

PREAMBLE

The General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO), meeting in … from … to … , at its … session,

Mindful of the current and potential, profound and dynamic positive and negative impacts of neurotechnology on human lives, including the human mind, and on human health and well-being, societies, environment and ecosystems,

Recalling that, by the terms of its Constitution, UNESCO seeks to contribute to peace and security by promoting collaboration among nations through education, the sciences, culture and communication and information, in order to further universal respect for justice, for the rule of law and for the human rights and fundamental freedoms which are affirmed for the peoples of the world,

Recognizing the leading role of UNESCO at the forefront of the international dialogue, knowledge production and standard setting on the ethics of science and technology and bioethics,

Convinced that the Recommendation presented here, as a standard-setting instrument developed through a global approach, based on international law, focusing on human dignity and human rights, as well as gender equality, social and global justice and sustainable development, physical and mental well-being and health, diversity, interconnectedness, global solidarity, fairness, non-discrimination, inclusiveness and environmental and ecosystem protection and sustainability, can guide the whole life cycle of neurotechnology in a responsible direction,

Guided by the purposes and principles of the Charter of the United Nations,

Considering the significant and growing global prevalence of neurological and mental health conditions, along with the profound suffering they cause for individuals and societies worldwide,

Acknowledging the potential of neurotechnology to offer innovative solutions for better preventive, predictive, diagnostic, therapeutic or rehabilitative purposes, benefitting humanity as a whole and providing opportunities for health promotion in all countries,

Also considering that the application of neurotechnology raises ethical, legal and societal issues and questions related to human dignity and human rights such as autonomy, privacy, mental and physical integrity, personal identity, freedom of thought, risk of discrimination, inequality and challenges to democracy, as well as challenges related to taking into account the ethically significant distinction between the medical and non-medical use of neurotechnology, and the distinction between its use as treatment or with the aim of enhancement,

Also recognizing that it is ethically imperative to explore and harness the potential of neurotechnology, particularly for medical and assistive use, and that failure to pursue such beneficial applications would raise significant ethical questions,

Reaffirming the importance of promoting and protecting the right of everyone to share in scientific advancement and enjoy its benefits,

Further recognizing the pivotal role of universal and meaningful connectivity and affordable access in unlocking the full potential of digital and emerging technologies to close all digital divides and accelerate progress across the Sustainable Development Goals,

- **First ever global “Recommendation” for neurotechnology ethics**
  - **banned sleep advertising**
  - **guardrails inside workplace and classroom**

What do you want to know more about?