Summer Internship: AI in Biology

The Causal Systems Immunology lab, embedded within the VIB.AI Center for AI and Computational Biology, is looking for motivated software and ML engineers who want to gain hands-on experience applying AI models to fundamental biomedical problems.

Your profile:

- Eager to learn about new machine learning approaches
- Technically proficient to manage large datasets
- Proficient or eager to learn to train/fine-tune PyTorch and/or JAX models
- Ability to work independently
- Basic interest in biology
- Background in software engineering, computer science, machine learning, bioengineering, artificial intelligence, or physics

What we offer:

- 4 week student job
- Access to state-of-the-art computing infrastructure (A100, H100, H200, B300).
- Work on cutting-edge AI applications in fundamental biomedical research
- Possibility to apply for a PhD after your studies
- An interdisciplinary team with biological and machine learning experts
- Hybrid working environment; transport to Ghent is compensated

Example task: *Using foundation models trained on millions of microscopy images, we found a so-far unknown biological structure in the murine and human liver that maintains memory of a previously diseased state up to 40 weeks. Your task could be to fine-tune these models and implement various feature attribution methods that precisely pinpoint what features are recognized by this model.*

Apply at https://summer26.causal.bio
Deadline: April 15

VIB is a leading life sciences research institute based in Flanders, Belgium. VIB conducts cutting-edge research in molecular biology, biotechnology, and computational biology in close collaboration with universities and industry.

VIB.AI is VIB's initiative dedicated to advancing artificial intelligence for life sciences. It brings together researchers working at the intersection of machine learning, biology, and data science to develop new AI methods for understanding complex biological systems.

The Causal Systems Immunology lab at VIB.AI and VIB-IRC aims to bridge inflammatory diseases and AI research. We particularly focus on large-scale perturbational datasets, and use probabilistic AI models to interpret and prioritize future experiments.