

Hongzhou Luan

Tel: +1 (510) 993 6534 ◊ Email: hluan@berkeley.edu ◊ LinkedIn: <https://www.linkedin.com/in/hongzhou-luan/>

Website: hongzhouluan.com/ ◊ Github: github.com/hzluan

TRAINING AND EDUCATION

UC Berkeley + UCSF

2023-

PhD Computational Precision Health

Primary Advisor: Prof. Ida Sim

Courses: CS282A Designing, Visualizing and Understanding Deep Neural Networks

CPH Cornerstones: project based lecture series on Deep Learning, Causal Inference and Healthcare AI Equity.

University of Oxford

2018-2022

MEng Engineering Science

Third year modules: Information Engineering, Control Engineering, Software Engineering, Biomechanics and Medical Modelling and Monitoring.

Fourth year modules: Machine Learning, Non-linear and Optimal Control, Medical Imaging and Informatics, Cellular Engineering and Therapy, Probability, Systems and Perturbation Methods and Mathematical Techniques.

AWARDS AND FELLOWSHIPS

· Jardine Scholar

2018 - 2022

A very prestigious full scholarship for the whole duration of four years at Oxford sponsored by the Jardine Foundation with an additional annual stipend of £10,300.

PUBLICATIONS

- Anna Zink, Hongzhou Luan, and Irene Y. Chen. "Access to care improves EHR reliability and clinical risk prediction model performance." ML4H 2024.
- Hugo Campos Jr, Daniel Wolfe, Hongzhou Luan, Ida Sim. "Generative AI as Third Agent: LLMs and the Transformation of the Clinician-Patient Relationship" Journal of Participatory Medicine (Under Review) 2025

RESEARCH EXPERIENCE

PhD Rotation

2024

Access Impact on Healthcare Outcomes

Advisor: Prof. Irene Chen

- Investigating the impact of access to care on the healthcare outcomes in various conditions using the All of Us Dataset.
- Assessing whether using access as a prediction feature increases equity performance of clinical prediction models.

PhD Rotation

2023

Cancer Survival Rate Prediction Using Deep Learning Models

Advisor: Prof. Adam Yala

- Ran experiments to discover fundamental factors that affect rank gain in a pretrained model.
- Built DL models for survival rate prediction in multiple cancer types.

Master's Project

2021 - 2022

Algorithms for Epilepsy Diagnosis in Low- and Middle Income Countries Supervisors: Professor Timothy Denison and Dr Tingting Zhu, IBME Center, University of Oxford

- Developed a seizure prognostic device using inter-ictal EEG channel data for low-cost epilepsy diagnostic device.
- Funding source: Wellcome Trust

Bachelor's Group Project

2020 - 2021

Closed-loop Controlled Anaesthesia System

University of Oxford

- Led a team of four students to develop a closed-loop controlled anaesthesia procedure based on the BIS index extracted from EEG signals for steady and stable anaesthetic states.
- Built a first-in-all pharmacodynamical and pharmacokinetics-based simulation modelling the patient reaction to anaesthetics to the BIS index with required open access data of the controller system was built using Simulink and yielded successful results when tested using human data.