Emilian Joseph Bowry

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Education

Trinity College, University of Cambridge
Engineering Tripos, 2020-2025

Judge Business School, University of Cambridge
Accelerate Cambridge, August 2022-July 2023

Experience

Software Developer — AI Compatible
Remote — August 2025 - Current

- Developing an automated privacy policy analysis model, this included:
  - Creating a Suprathreshold Stochastic Resonance (SSR) pipeline to mitigate high-dimensional hubness, effectively amplifying the signal-to-noise ratio of semantically related clusters.
  - Developing an unsupervised probabilistic consensus engine, integrating Expectation-Maximization (EM) and Monte Carlo simulations and perturbation analysis to model the topological properties of the embedding space.
- Redeveloping website, full-stack web development using:
  Typescript, React Python, express.js, Prisma, PostgreSQL, mongoDB.
- Managing cloud infrastructure, including virtual machines and networking.

Co-founder — Luucid.tech
Cambridge — August 2022 - October 2023

- Created novel electrochemical and material mechanisms for detecting spiking agents in beverages.
- Grant writing to organising a UK wide drink spiking prevalence assessment.

Software Development and Business Analysis Intern — Atomic Media
Nottingham — April 2022 - August 2022

- Full stack web development using a variety of languages and technologies.
- Analysed new business opportunities and ventures, writing insight articles.
- Led skill days, teaching other developers the low-end networking implementations of the technologies they implement:
  https://github.com/emilbowry/NetworkProgrammingLesson
- Organised the weekly cyber-security brief about emerging threats and vulnerabilities.

Projects and Additional Experience

Phasor Average Estimator: Developed a scale-invariant, Phasor-based Statistical Model to solve hardware jitter and Inter-Symbol Interference (ISI), in a Molecular Communication system.

Neural Data Analysis: Built a simulation system for Lateral Intraparietal Cortex (LIP) neurons to evaluate and test different statistical models for neuron impulses. Used tools, Hidden Markov Models (HMMs), Peri-Stimulus Time Histogram (PSTH), Fano-Factor. Used Bayesian Inference to evaluate model brittleness and mismatch.

Integrated Design Project: Group Project building a self-navigating robot – my contributions to the software led us to coming 2nd place in a University wide robotics competition.

Published and Open Source Software

Plotting Tools: https://github.com/emilbowry/Plots
https://pypi.org/project/plottingtools-emilbowry

Extension of the python Plotly library to conveniently visualise 4-dimensional datasets. Using metaprogramming techniques to create a robust and adaptable framework.

Code Editor: https://github.com/emilbowry/editor

A fork of Microsoft VSCode, code editor with telemetery and LLM integrations removed, along with some additional features.

Monochrome: https://github.com/emilbowry/monochrome

Fork of the Black code-formatter.

Awards and Achievements

Goldman Sachs: Awarded a scholarship and Engineering Spring week.

Imperial College London: Awarded the President's Scholarship to Imperial College London, given to the top 112 candidates that demonstrated the "highest academic excellence at interview".

Referees available upon request