Emilian Joseph Bowry

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Education

Trinity College, University of Cambridge
BA, 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

- **Regulatory Analysis Engine:**
  - Adapted and improved state-of-the-art research on data extraction from privacy policies.
  - Devised an unsupervised semantic equivalence detection model of legal statements.
- **Redeveloping full-stack website:**
  - Style generation: client-side background image generator, CSS geometry engine, generalisation of CSSTypes library
  - Direct style-sheet injection to handle high-performance style changes, preventing re-rendering by modifying CSS rules rather than DOM elements.
  - Contextual telemetry analysis, creates interaction based profiles utilising site-entry points, device and location data to profile user events.
  - Managing cloud infrastructure, including virtual machines and networking.
  - Devising and prototyping HTTP and API servers from scratch using Rust.
  - Managing backend API with Express.js, Prisma, PostgreSQL, MongoDB.
  - Engineered an ISO 32000 PDF generator: that maps JSON data structures into a PDF.

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

- Created novel electrochemical and material mechanisms for detecting spiking agents in beverages.
- Determined product-market fit and commercial viability of scientific research.

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

- Built an anomaly detection system to infer potential theft from fleet fuel logs.
- Analysed new business opportunities and ventures, writing insight articles.
- Led skill days, which taught developers the low-level networking implementations of the tools they use: https://github.com/emilbowry/NetworkProgrammingLesson
- Organised the weekly cyber-security brief about emerging threats and vulnerabilities.

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 make 4+ dimensional correlations intuitive to visualise, using metaprogramming techniques to create a robust and adaptable framework.

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

A fork of Microsoft VSCode that: Improves supply chain security by removing telemetry "at the source"; Removes LLM, MCP and agentic AI; and adds new features, like a persistent homepage, and cross-codebase note taking system.

AST Debug Logger: https://github.com/emilbowry/editor

A debugging tool that intercepts Python code before execution to toggle any 'debug' flags, even from orphans and disconnected nested code. It also intercepts and saves logs.

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

Fork of the strict Black code-formatter. Using tabs and other slight formatting changes

Algorithmic Trading resource: https://github.com/emilbowry/algorithmicTrading

A teaching resource that develops and implements knowledge gained in my signals processing, statistics, systems and other engineering courses; research into advanced mathematics to develop examples of: Quantitative Risk Modelling, Alpha Generation and Backtesting Engines.

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. It provided zero-lag estimation, unlike moving averages; retained phase information, unlike mixture models; and provided a non-parametric way to estimate state.

Neural Data Analysis: Built an Extract, Transform, Load (ETL) framework for Lateral Intraparietal Cortex (LIP) neuron impulses, in order to analyse stochastic models. The core objective was to evaluate statistical models for varying simulation parameters.

iCloud Find My messaging service: A system to piggyback on Apple's "Find my iPhone" API to remotely communicate between devices without knowledge of any identifiers like IP addresses.

Automated Notes Reasoning: A system that makes inferences about my course notes. Using techniques derived from Category Theory and reverse-engineering parts of the 'Obsidian Markdown Editor'.

Module Type Objects: Built a parallel object system using modules as the core components in Python to allow for more flexible and better controlled attributes.

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