

Emilian Joseph Bowry

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EXPERIENCE

AI Compatible 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.

Luucid.tech August 2022 - October 2023

Co-founder

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

Atomic Media April 2022 - August 2022

Software Development and Business Analyst Intern

- 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.

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 lead us to coming 2nd place in a University wide robotics competition.

PUBLISHED AND OPEN SOURCE SOFTWARE (SEE GITHUB)

Plotting Tools

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

Code Editor

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

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