Izaac Mammadov JP

Address: 292 White Hart Lane
London, N17 8JP
Mobile: +44 7825308878

Email: izaac@mammadov.co.uk
Website: izaac.mammadov.co.uk
GitHub: IzaacMammadov

EDUCATION

- **Corpus Christi College, University of Cambridge** — **Cambridge, UK**
  B.A. (Hons) Mathematical Tripos [Mathematics] — *October 2019–June 2022*

  - High 1st Class, scoring 84% and ranked 18th out of ∼250 students.
  - Awarded two scholarships for academic excellence, including the Richard Metheringham prize by the Worshipful Company of Cutlers.

- **The Latymer School** — **London, UK**
  A Levels in Mathematics, Further Mathematics, Physics and Chemistry — *September 2012–June 2019*

  - A*A*A*A* (A Level), SSS (STEP Mathematics), Silver Medal in British Mathematics Olympiad (top 50).

WORK EXPERIENCE

- **Gattaca** — **London, UK**
  Software Engineer — *November 2025–Current*

  - **Low-latency Development**: Developed low-latency infrastructure in `Rust` as part of "TitanBuilder" (block-builder on `Ethereum` mainnet with the largest market-share) and "TitanRelay" (a popular `Ethereum` relay to connect validators and block-builders).
  - **Alt-Chains**: Worked on `Solana` block-building and validator execution scheduling.

- **Highbury Corner Magistrates Court** — **London, UK**
  Magistrate Judge / Justice of the Peace (JP) — *May 2025–Current*

  - **Magistrate**: Volunteer Judge, adjudicating summary and either-way criminal cases and sentencing defendants.

- **The Quarry LP** — **Remote**
  Quantitative Researcher — *January 2024–November 2025*

  - **Strategy Creation**: Created and improved on quantitative strategies based on Bayesian machine-learning techniques, with a focus on trading equity volatililty.
  - **Strategy Backtesting**: Backtested medium-frequency quantitative strategies and created reports outlining their profit metrics and analysis on their hyperparameters.
  - **Portfolio Optimisation**: Created interactive pages to display results surrounding optimal portfolio allocation and calculating mean-variance efficient portfolios, as well as sandboxes for visualising different portfolio weightings.
  - **Derivatives Pricing**: Developed systems for pricing a variety of vanilla and exotic derivatives and calculating their respective greeks for the purposes of backtesting and execution.

- **Wintermute Trading** — **London, UK**
  Algorithmic Trader — *July 2022–December 2023*

  - **Market-Making**: Refined high-frequency market-making strategies which traded dozens of cryptocurrencies across multiple exchanges, as well as automated the setting of parameters for those strategies using A-B testing.
  - **Exchange Integration**: Integrated centralised cryptocurrency exchanges' endpoints (Order Entry, Order Feed etc.) using WebSockets, REST and FIX protocols.

- **Flow Traders** — **Amsterdam, The Netherlands**
  Trading Intern — *June 2021–August 2021*

INTERESTS AND SKILLS

- **Programming**: Proficient in `Python` (including `aiohttp`, `matplotlib`, `numpy`, `pandas`, `scikit-learn` and `scipy`), `C++` (including the `boost` libraries) and `Rust` (including `tokio`). Experienced in managing `PostgreSQL` and `MongoDB` databases and `AWS` infrastructure (`EC2`, `S3`, `RDS`).

- **Projects**: Currently run my own self-hosted website, build with static site generator `Hugo` and served by `NGINX`, as well as my own email server and mailbox using `Dovecot` and `Postfix`. I also run my own self-hosted `Urbit` star.

- **Foreign Languages**: Raised in a bilingual household speaking English and Russian as well as Azerbaijani.

- **Interests**: Promoting Free and Open-Source software use and helping people maintain their privacy. Cryptography and Crypto CTF (Capture The Flag) competitions.