

Fawaz Shah

Personal Website: fawazshah.github.io

GitHub: github.com/fawazshah

Experience

Bloomberg L.P.

- *Software Engineer* *Sept 2021 - present*
 - Part of the Equity Calculators team in Strategy Indices, building calculation logic that powers thousands of equity benchmark indices. Working mainly in C# and SQL
 - Helped develop a new system architecture to handle corporate actions and daily index calculations. Improved calculation speed by 20x by bulking up data retrieval/storage, minimising amount of data stored and optimising Rabbit messages
 - Led migration of over 150 indices to this new system, keeping stakeholders in Product/Operations teams informed and performing stringent testing of the new system before migrating
 - Continuously refactored index configuration to allow more generic grouping, ranking and filtering capabilities of stocks. This enabled product owners to create more indices via self-service rather than needing engineering involvement for every new index
 - Led a team of 4 in an internal hackathon project to prototype a new web application for creating indices, using ASP.NET and Blazor with Bootstrap components. Demo'ed to internal Engineering and Product teams, with positive feedback around simplicity and ease of use compared to the existing solution
 - Mentored new joiners to the team, and separately a university student applying to Bloomberg as part of Bloomberg Women In Tech

Bloomberg L.P.

- *Software Engineering Industrial Placement* *June - Sept 2020*
 - Worked in Commodities Navigation & Analytics, a team that services commodities data to Bloomberg's financial analysts
 - Added a feature to Amundsen, a dataset discovery web-app, to let analysts launch Jupyter notebooks with datasets automatically loaded into Pandas dataframes
 - Improved configurability of the ETL pipeline ingesting data into Amundsen from the Commodities datalake
 - Developed an automated smoke tester for the Presto query engine serving the datalake
 - Incorporated historical price search and improved charting capabilities into one of the team's Bloomberg Terminal functions

Bloomberg L.P.

- *Software Engineering Intern* *July - Sept 2019*
 - Worked in Strategy Indices, developing a visualisation tool to display the structure, configuration and historical data of indices created with 'Behaviours', an internal C# framework
 - Created user interfaces using WPF and XAML, with an SQL database behind the scenes

Education

Imperial College London

- *MEng. Mathematics & Computer Science (Joint Hons.)* *2017-2021*
 - Awarded First Class Honours
 - Thesis topic: *Detecting Political Bias On Reddit With Transfer Learning*
 - Modules of interest: Natural Language Processing, Machine Learning for Imaging, Time Series Analysis

Positions of Responsibility

Imperial College Department of Computing EdTech Group

- *Volunteer Software Engineering Contributor* *Aug 2020 - Sept 2021*
 - Developed key features of a new application for accessing lecture notes and coursework feedback, to be used by all 1000+ Department students
 - Reduced site latency when accessing lecture notes by 75%, and redesigned the homepage for mobile-friendly use
 - Developed frontend in React, with Python + Flask for API work

Undergraduate Teaching Assistant

- *Modules: Graphs & Algorithms, Logic, Reasoning About Programs* *Oct 2019 - Mar 2020*
 - Led weekly tutorial sessions for a group of 9 first year Joint Maths & Computing students
 - Marked weekly tests and provided guidance and feedback throughout the academic year

Notable Achievements

- Awarded a Merit in Imperial College's Japanese Horizons Level 2 Course
- Awarded Union Colours for outstanding service to Imperial College Union