

RADOSTIN PETROV

✉ radostin.petrov99@gmail.com
in linkedin.com/in/radostin-petrov

github.com/radostinpetrov
radostinpetrov.github.io

EXPERIENCE

Rokos Capital Management

London, UK

Full Stack SWE, Quantitative Technology

Sep 2022 – Dec 2024

- Implemented a RAG-based news digestion pipeline in a C# back-end service, designed to run user-generated prompts on economic data and news by interacting with LLM models using **Python** and **Langchain**
- Managed the complete event-based data pipeline for macroeconomic data using **C#** and **RabbitMQ** messaging bus and persisting datapoints in a time series database. Worked with **React** front-end to create interactive UI
- Engineered a high-performance caching system in **.NET C#** for a trade management service managing 5+ million database rows, resulting in a 60% reduction in cold startup times
- Integrated the flow of time series data into **Python** and **Pandas**-based mathematical models, enabling accurate forecasting and analysis, responsible for generating PNL around crucial economic releases
- Rotated across three client-facing teams, working with users on requirements in an agile manner. Provided crucial support for critical systems across the tech stack in an on-call rotation

Squarepoint Capital

London, UK

SWE Intern, Order Gateway

Apr 2021 – Sep 2021

SWE Intern, Market Data

Jun 2020 – Sep 2020

- Created a REST API service in **Python**, serving live metadata from market gateways automating the process of sending market orders
- Implemented in **FastAPI** asynchronously (**asyncio**), tested and benchmarked to handle 1000 requests in 4 seconds
- Integrated **Consul** publishing features into low-latency gateways in **C++** improving metadata availability and providing service visibility to stakeholders
- Developed two low-latency feed handlers for the Orion Market Data platform in **C++**
- Implemented one-to-one mapping scripts to filter incoming market data traffic in **Python** creating 5x latency reduction in market feeds

EDUCATION

Imperial College London

London, UK

MEng (Hons) Computing, high 2:1

Sep 2018 – Jul 2022

- Awarded a First in Final Year Project in Natural Language Processing Psychotherapist Chatbot
- 88% in Software Engineering Project distinguished with the CPP Group Project Award for placing in the top 10 of projects in the year

PROJECTS

KChess | Kotlin, Gradle, LibKTX(LibGDX), Node.js, JUnit, Agile

2021

- Created an extendable chess engine and a multiplayer chess front-end in **Kotlin** using **Node.js** for the web server
- Contributed to the core game engine and **LibKTX** representation supporting 12 chess variants and performed Unit Testing with a 90+% coverage of all compiled code

EnProgress | Flutter, Node.js, PostgreSQL, Docker, Heroku, Agile

2020

- Developed a cross-platform application for a collaborative student study space using **Flutter** and **Dart** for the front-end and **Node.js** and **Heroku** for the back-end

Pintos | C, Operating Systems, Git

2019

- Extended an x86 OS (Pintos) with kernel thread scheduling, user programs loading and virtual memory support
- Built the multi-level queue scheduler and user program process handling in **C** and managed the documentation for milestone code reviews

SKILLS

- Languages:** C#/.NET, Python, Java, C/C++, Typescript/Javascript, SQL/MySQL
- Technologies:** React, Unix/Linux, Bash shell, Git, GitLab CI/CD, Docker, Flask, Node.js, RabbitMQ, Pytorch, Langchain

LEADERSHIP, VOLUNTEERING & INTERESTS

- Secretary, Department of Computing Society (DoCSoc)** - Organised and chaired regular meetings and popularised weekly newsletters to over 1400 members college-wide; helped raise over £90k in sponsorship
- Organiser, IC Hack 19 & 20** - Worked as a team lead organising the UK's largest student-run hackathon with over 450 attendees and £60k in sponsorship funding
- Algorithmic Trading Society, Poker Society** - Participating in society meetings