TS0YU

Cambridge, UK

ts0yu@proton.me ⋄ GitHub

OBJECTIVE

Researcher and developer focused on building robust trading systems and learning more about financial mathematics and machine learning, looking for research engineering or Rust development roles.

SKILLS

Programming	Rust, Python, Git, C++, C, Solidity, Foundry, Javascript (Node.js), LaTeX
Relevant Skills	Quick learner, excellent communicator, creative, hard-working and motivated
Interests	Machine learning, derivatives, linear algebra, topology, statistical mechanics

EXPERIENCE

Research engineer   Jan 2022 - Jun 2022
Alongside Finance   *Remote*

- Researched various pricing mechanisms for the core decentralized finance protocol, using my programming and analytical skills to help identify and evaluate potential solutions.
- Helped build, optimize and design rigorously tested internal smart contract libraries, which contributed to the overall efficiency and reliability of the company's codebase.
- Helped develop the core finance protocol using Solidity and Foundry, collaborating with the rest of the team to ensure the successful implementation of key features and functionality.

OPEN-SOURCE

- Primary contributor to Arbiter, a tool to build, test, and study protocols on the Ethereum Virtual Machine. Assisted with the development of key features, such as a Flashbots executor, and a robust and lightweight simulations sandbox.
- Principal developer of Folio, a blazing-fast compiler and DSL for the FVM, a finite-state-machine on the EVM. Folio is a macro-based language that allows a user to write programs to put capital to work via a set of opcodes. Implemented lexing, parsing, and custom hexadecimal bytecode generation modules.

EXTRA-CURRICULAR ACTIVITIES

- Pursuing ABRSM Grade 7 in cello and passionate about classical music, consistently dedicating time to improving my skills and broadening my knowledge of the genre.
- Member of Boys First/Senior Squad at Cantabrigian Rowing Club, currently training 3-4 times a week.