YOUZHANG (MARK) SUN

youzhang.mark.sun@gmail.com | Lemonsity.com | LinkedIn | GitHub

SKILLS

Languages	Python, C, Java, Haskell, Racket, Rust, JavaScript, SQL
Technology	Node.js, React (Native), Nest.js, Prisma, PostgreSQL, Rocket.rs (Rust), Ethereum blockchain, ethers.js, WalletConnect, Git, Linux
Academic Interest	Theory of Computation, Theoretical Math, Functional Programming

EXPERIENCE

Lodestone | Game Server Self-Hosting | Backend & Frontend Developer | GitHub   December 2021 – Jan 2023

Rust, sqlx, Sqlite, zip-rs, React, Rocket.rs, MongoDB

- Co-designed and developed server hosting client with **Rust**
- Implemented **RESTful API** & CLI
- Implemented data storage with **Sqlite** and **sqlx**.
- Realized file upload, download, extract, compress, and size limit for the Rust client with **zip-rs**
- Implemented hardware monitoring and visualization on a web dashboard with **React** and **react-chartjs-2**

dApp Technology Inc. | Backend & Frontend Developer   January – August 2022

JavaScript, Node.js, Nest.js, React Native, ethers.js, blockchain, WalletConnect, Prisma, PostgreSQL

- Implemented **blockchain** interaction in **React Native** with **ethers.js** to enable for ERC20 token transactions on Ethereum-based blockchain on mobile
- Integrated **WalletConnect** for app to communicate with decentralized applications (dapp)
- Developed **RESTful API** endpoints with **PostgreSQL** using **Nest.js** and **Prisma**

TD Securities | Developer   January – April 2021

Java, MS SQL, Python, Pandas, JavaScript

- Completed on-going **Java** data processing application through effective communication with client
- Implemented **MS SQL** interaction and data processing with associated libraries such as java.sql, **Python Pandas**

TA EXPERIENCE

University of Toronto | CSCC24 TA   May – Aug 2023

- Hosting weekly tutorial
- Hosting office hour for assignments
- Term tests grading

University of Toronto | CSC/MATA67 TA   Jan – Apr 2023

- Hosting weekly tutorial and office hour
- Term tests grading

University of Toronto | CSCB36 TA   May – August 2021

- Hosting weekly office hour
- Weekly grading

EDUCATION

University of Toronto | Candidate Honours Bachelor of Science   2019 – 2023/4 (Estimated)

- Specialist (Co-operative) Program in Computer Science – Software Engineering Stream
- Major Program in Mathematics
- Cumulative GPA: 3.97
- Relevant Courses in Computer Science:
  - **CSCB36**: Introduction to the Theory of Computation
  - **CSCC24**: Principles of Programming Languages
  - **CSCC63**: Computability and Computational Complexity
  - **CSCC73**: Algorithm Design and Analysis
  - **CSCD92**: Reading Course on Dependent Type
- Relevant Courses in Mathematics:
  - **MATC01**: Groups and Symmetry
  - **MATC09**: Introduction to Mathematical Logic
  - **MATC44**: Introduction to Combinatorics
  - **MATD12**: Introduction to Set Theory (Now MATD09)
  - **MATD94**: Reading Course on Algebraic Graph Theory