github.com/jianrong7 | linkedin.com/in/jianrong7 | https://jianrong.dev

Year 2 CS Student with domain knowledge in real estate and sustainable finance. Looking for 2024 Summer Internships.

EDUCATION

BSc in Computing, Computer Science, Expected Graduation Year 2025

National University of Singapore, Singapore

- GPA: 4.88 / 5.00 (First Class Honours)
- NUS Merit Scholarship Recipient Highly coveted scholarship awarded to high calibre individuals
- Relevant Coursework: Object-Oriented Programming, Data Structures and Algorithms, Linear Algebra

WORK EXPERIENCE

London Stock Exchange Group, Singapore | Software Engineer Intern | May 2023 - Present

Full-stack development for the Sustainable Finance Innovation (SFI) team

SFI is part of LSEG Labs, delivering fintech solutions to enable businesses to track carbon emissions using scenario analysis

Source Academy, Singapore | Software Engineer Intern | Jan 2023 - Apr 2023

Added a new variation of the Source language to enable parallel processing using the GPU

- Source Academy is an open-source platform used to teach NUS undergraduates foundational programming concepts
- Integrated the latest WebGPU standard into Source to parallelize audio processing using the GPU, resulting in performance improvements by up to 20 times

Google Developer Student Club NUS, Singapore | Software Engineer | Aug 2022 - May 2023

Full-stack development for Project Siew Dai, a stakeholder management system for Diabetes Singapore

Implemented site-wide authorization features using React, Express, TypeScript, and PostgreSQL

99 Group, Singapore | Software Engineer Intern | Jan 2022 - Dec 2022

Frontend development on the SEO demand team for the consumer-facing 99.co property marketplace

- 99 Group is a leading online real estate marketplace operating in Southeast Asia
- Created a <u>reusable React Hook</u> from scratch to convert legacy adaptive components to a modern responsive web layout (JavaScript, React, Redux)
- Initiated implementation of an automated process to ensure pull requests follow company's convention, resulting in cleaner commits, boosting developers' productivity by 10% (GitHub Actions)
- Eliminated Mobile Usability and Core Web Vitals issues, from 1,500 to 0 and from 10,400 to 0 respectively
- Boosted organic performance by up to 9% week-on-week and up to 145% year-on-year
- Wrote automated Python and Bash scripts to convert all images to modern WebP format, reducing file sizes by 56%

SKILLS

Languages: JavaScript, TypeScript, Python, Java, Golang

Frameworks: React (Next.js), Express.js, React Native, Gin, Django, FastAPI

Others: Git, Unix, Docker, AWS, GCP, Heroku, Postman, SQL (PostgreSQL), NoSQL (MongoDB), Serverless

PROJECTS

Gossip With Go | GitHub Repository | Dec 2022

Full-stack web forum built with React, TypeScript, Golang, Gin, and PostgreSQL

- Features include rich text editors, image uploading, and usage of OpenAI's GPT AI model
- Hosted frontend build files from Docker image on AWS S3 bucket, which is served through AWS CloudFront
- Deployed backend's Docker image on an AWS EC2 instance

Web3 Watchlist | GitHub Repository | Apr 2022

Full-stack web application for crypto and NFT enthusiasts to monitor online assets

- Connected application to CoinGecko's crypto API and stored used data on Redis for quick retrieval
- Deployed Docker container on Google Cloud Run for easy scalability

<u>DriveSG</u> | <u>GitHub Repository</u> | Aug 2021

Mobile quiz application built with React Native and Firebase for drivers-to-be to ace theory tests

Extracted text from over 800 images using Optical Character Recognition to create JSON data for questions

EXTRA-CURRICULAR ACTIVITIES

Conjunct Consulting | Trainee | Jan 2023 - Mar 2023

Seedly | Student Ambassador | Aug 2022 – May 2023