

EXPERIENCE

Software Engineering Intern <i>London Stock Exchange Group - Sustainable Finance Innovation Unit</i> LSEG Labs addresses challenges in financial markets by assessing climate risks and simplifying ESG disclosure <ul style="list-style-type: none">Contributed to the development of a microservices architecture, enhancing scalability with minimal overhead costsLeveraged Infrastructure as Code (IaC) with Terraform to deploy a data-sharing module, achieving consistent, error-free deployments, reduced provisioning times, and ensuring idempotency across multiple environmentsImplemented testing pipelines for cloud applications, ensuring error-free releases and minimizing deployment risks	Jun. 2024 – Present <i>Singapore</i>
Software Engineering Intern <i>NodeFlair - Tech Career Platform for Southeast Asia</i> NodeFlair is a startup that connects tech talents with job opportunities, streamlining the recruitment process <ul style="list-style-type: none">Extended existing API on the Ruby on Rails back-end to accommodate new services, elevating site capabilitiesImplemented automated testing in parallel, achieving a 50% reduction in Continuous Integration (CI) testing timeSet up Docker images for development to mimic production environment, reducing on-boarding time by 80%Deployed programmatic SEO strategies to automate the creation of SEO-optimised pages, increasing organic trafficMaintained and upgraded functionalities of a Plasmo browser extension, facilitating smoother access to AI toolsAssisted in upgrading dependencies, ensuring compatibility and improving overall site performance	Jan. 2024 – Jun. 2024 <i>Singapore</i>
Software Engineering / Machine Learning Intern <i>Home Team Science and Technology Agency (HTX) - xData</i> xData builds data and AI products that enhances the Home Team’s capabilities in internal and mission-based operations <ul style="list-style-type: none">Utilised GenAI to automate the construction of knowledge graphs from unstructured textLeveraged knowledge graphs and vector databases to enhance multi-hop question answering (QA) performance during retrieval augmented generation (RAG), leading to greater context precisionExplored multi-agent LLMs to augment QA capabilities, leading to enhanced complex analysis performanceWorked on Vertex, an in-house NLP tool serving 10+ government agencies - redesigned frontend with React to improve user experience and refactored codebase to reuse components for cleaner implementationUtilized Python with BeautifulSoup for web scraping and performed data cleaning using pandas and NumPy	Nov. 2023 – Jan. 2024 <i>Singapore</i>

EDUCATION

National University of Singapore <i>Bachelor of Engineering in Computer Engineering, E-Scholars Programme (3yrs BEng + 1yr MSc)</i>	Singapore
Hwa Chong Institution <i>GCE A-Levels, 90/90RP (PCME) with H3 Physics Distinction</i>	Singapore

PROJECTS / EXTRACURRICULARS

Programming Lead CloudHacks 2024 <ul style="list-style-type: none">Led a team of 3 using Agile methodology to redesign and rebuild promotional website with the Nextjs framework	Nov. 2023 - Present
Basic Home Server Repurposed laptop running Ubuntu Server for personal use <ul style="list-style-type: none">Exposed to the internet via Cloudflare Tunnels and secured with Cloudflare Zero TrustUtilised as a cloud compute platform to self-host backend services and Github runners for other personal projectsPrimarily functioning as a NAS (Network Attached Storage) hub for a self-hosted cloud storage solution	Feb. 2024 - Present
AIded Utilised VGG16 and YOLOv8 to detect anomalies in secure workplaces, accelerating the accounting process	
HeritageHunt Full-stack native application featuring a personalised and gamified way to learn about Singapore	
SoundBytes Full-stack web application for personalised news podcasts, built with OpenAI and Amazon Polly	

AWARDS

Micron BACC 2024 - 2nd Runner-up Ground Zero 2024 - Finalist SCS Splash Awards 2023 - 1st Place SUTD What the Hack 2023 - 1st Place HTX HacX! 2023 - 2nd Runner-up CloudHacks 2023 - 1st Place

TECHNICAL SKILLS

Languages: JavaScript, Python, Ruby, C, C++, SQL, PostgreSQL, HTML/CSS
Frameworks: React, React Native, Node.js, Flask, Django, Ruby on Rails, Plasmo
Developer Tools: Git, Docker, AWS, Microsoft Azure, Google Cloud Platform, Firebase, Supabase, Neo4j
Libraries: NumPy, pandas, Matplotlib, TensorFlow, PyTorch, LangChain, ThreeJS