

EXPERIENCE

- Software Engineering Intern @ London Stock Exchange Group (LSEG)** Jun. 2024 – Dec. 2024
LSEG Labs addresses challenges in financial markets by assessing climate risks and simplifying ESG disclosure
- Utilized Infrastructure as Code (IaC) with Terraform to provision micro-services for a data ingestion pipeline, reducing provisioning times by 90% and maintaining idempotency across multiple development and test environments
 - Designed and deployed infrastructure using AWS SNS for efficient Pub/Sub data-sharing between micro-services
 - Led development of replay feature with Athena for event-driven architecture, accelerating disaster recovery by 80%
 - Implemented CRUD module for managing granular data access permissions within a NoSQL database environment
 - Set up key overloading in DynamoDB to decrease reliance on GSI for complex queries, cutting down costs by 60%
 - Created test pipelines for cloud services, decreasing failed deployments by 10% and minimizing deployment errors
 - Explored WASM SQLite with NoSQL backend, enabling complex analytics and cutting down backend calls by 40%
- Software Engineering Intern @ NodeFlair - Tech Career Platform for SEA** Jan. 2024 – Jun. 2024
NodeFlair is a startup that connects tech talents with job opportunities, streamlining the recruitment process
- Enhanced and optimized the existing Ruby on Rails API to support large-scale, high-availability services and boost site performance and scalability for over 400,000 monthly users
 - Maintained and upgraded functionalities of a Plasmio browser extension, facilitating smoother access to AI tools
 - Leveraged parallel integration and e2e testing to achieve a 50% reduction in Continuous Integration (CI) test time
 - Set up Docker images for development to mimic production environment, reducing on-boarding time by over 80%
 - Utilized A/B tests on key landing pages for data-driven changes, boosting click-through rates by 18%
 - Deployed programmatic SEO to automate creation of SEO-optimised pages, increasing organic traffic by 60%
- Software Engineering / ML Intern @ Home Team S&T Agency (HTX)** Nov. 2023 – Jan. 2024
xData builds data and AI products that enhances the Home Team's capabilities in internal and mission-based operations
- Employed BeautifulSoup for web scraping, with data cleaning and transformation using Pandas and NumPy
 - Utilised GenAI for the construction of knowledge graphs from over 40,000 pages of unstructured legal documents
 - Implemented multi-agent LLMs for question answering (QA), for a 15% increase in accuracy in data-analysis tasks
 - Integrated knowledge graphs and vector databases to enhance multi-hop QA performance during retrieval-augmented generation (RAG), resulting in a 30% increase in evaluation scores and improved context precision
 - Initiated frontend redesign of Vertex, an in-house NLP tool serving 10+ agencies, upping feedback scores by 40%

EDUCATION

- National University of Singapore** Expected Grad: 2026
B.Eng Computer Engineering (E-Scholars Programme) - 4.9GPA

PROJECTS / EXTRACURRICULARS

- Founding Software Engineer @ Check (Iterative W25)** | www.checkeduai.com Feb. 2025 - Present
- Led migration of Next.js & Supabase app to GCP, reducing costs by 30% and improving performance by 20%
- Insecure File Service** | Simple file sharing service for public use - try it out at ifs.kenf.dev! Sep. 2024 - Present
- Developed a serverless file sharing service using AWS Lambda, CloudFront, and S3, managed with Terraform
 - Adopted by over 50 users for sending files to public printers, eliminating the need for sign-ins on public machines
- Basic Home Server** | Repurposed laptop running Ubuntu Server for personal use Feb. 2024 - Present
- Exposed to the internet via Cloudflare Tunnels and secured with Cloudflare Zero Trust for remote SSH access
 - Utilised as a cloud compute platform to self-host backend services and GitHub runners - primarily used as a NAS
 - Set up cron jobs to automate backups on AWS S3 Glacier for cost-efficient redundancy without reliance on RAID

AWARDS

- NUS Hack&Roll '25 - Top 8** | **NUS-ISE Micron BACC '24 - 2nd Runner-up** | **Ground Zero '24 - Top 10**
SCS Splash Awards '23 - 1st | **SUTD WhatTheHack '23 - 1st** | **HTX HacX! '23 - 3rd** | **CloudHacks '23 - 1st**

TECHNICAL SKILLS

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