Kenneth Gao

linkedin.com/in/thisiskenf | github.com/duckyfuz
+65 8884 4154 | hello@kenf.dev | www.kenf.dev

EXPERIENCE

Software Engineering Intern — Jan. 2024 – Present
NodeFlair - Tech Career Platform for Southeast Asia — *Singapore*
NodeFlair is a startup that connects tech talents with job opportunities, streamlining the recruitment process
- Extended existing API on the Ruby on Rails backend to accomodate new services, elevating site capabilities
- Implemented automated testing in parallel, achieving a 50% reduction in Continuous Integration (CI) testing time
- Deployed programmic SEO strategies to automate the creation of SEO-optimised pages, increasing organic traffic
- Utilized A/B tests on key landing pages, leading to data-driven changes that boosted click-through rates by 18%
- Maintained and upgraded functionalities of a Plasmo browser extention, facilitating smoother access to AI tools
- Assisted in upgrading dependencies, ensuring compatibility and improving overall site performance

Programming Lead — Nov. 2023 – Present
CloudHacks 2024 — *Singapore*
- Led a team of 3 using Agile methodology to redesign and rebuild promotional website with the Nextjs framework

Software Engineering / Machine Learning Intern — Nov. 2023 – Jan. 2024
xData, Home Team Science and Technology Agency (HTX) — *Singapore*
xData builds data and AI products that enhances the Home Team's capabilities in internal and mission-based operations
- Utilised GenAI to automate the construction of knowledge graphs from unstructured text
- Leveraged knowledge graphs and vector databases to enhance multi-hop question answering (QA) performance during retrieval augmented generation (RAG), leading to greater context precision
- Explored multi-agent LLMs to augment QA capabilities, leading to enhanced complex analysis performance
- Worked on Vertext, 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 implementation
- Utilized Python with BeautifulSoup for web scraping and performed data cleaning using pandas and NumPy

SSP Platoon Commander — Dec. 2022 – Nov. 2023
16C4I Bn, Singapore Armed Forces — *Singapore*
- Led a 20+ member platoon to maintain constant battalion operational readiness
- Automated administrative chores such as duty scheduling via scripting, leading to time savings of over 60%

EDUCATION

National University of Singapore — Singapore
Bachelor of Engineering in Computer Engineering, E-Scholars Programme (3yrs BEng + 1yr MSc)

Hwa Chong Institution — Singapore
GCE A-Levels, 90RP (PCME) with H3 Physics Distinction

PROJECTS

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
- Utilised as a cloud compute platform to self-host backend services and Github runners for other personal projects
- Primarily functioning as a NAS (Network Attached Storage) hub for a self-hosted cloud storage solution

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's culture
SoundBytes | Full-stack web application for personalised news podcasts, built with OpenAI and Amazon Polly

AWARDS

Micron NUS-ISE BACC 2024 - *2nd Runner-up* | **SCS's Splash Awards 2023** - *1st Place*
SUTD's What the Hack 2023 - *1st Place* | **HTX's 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: pandas, NumPy, Matplotlib, TensorFlow, PyTorch, LangChain, ThreeJS