Emmanuel Oh Eu-Gene

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Experience

Software Engineer at Shopee

Sep 2024 – Present

Software Engineer at Knovel Engineering

Jan 2024 - Aug 2024

- Developed browser extensions for dynamic web scraping with LLMs and running remote browser automations with Puppeteer
- Deployed a full-stack LLM web application to third-party and commercial cloud services
- Developed and benchmarked AI solutions for speech-to-text transcription and speaker diarization

Software Engineering Intern at Fabrica.Al

Oct 2022 - Apr 2023

- Developed self-hosted CI/CD workflow for building, testing and deploying robot software with Jenkins
- Implemented build systems, shell scripts and dotfile configurations to enhance developer productivity

Software Engineering Intern at LUMIQ

Jun 2022 - Aug 2022

- Migrated self-managed plugins to support new Kubernetes versions on AWS EKS
- Deployed a Google Apps Script add-on as a proof of concept to make optimizer API accessible from Google Sheets

Software Engineering Intern at Netatech Engineering

May 2021 – Aug 2021

- Implemented resource usage, irrigation schedule and environment data visualizations with Plotly.js
- Deployed serverless functions for remote device control with MQTT and AWS IoT Core

Education

Singapore Management University

BSc Computer Science (Artificial Intelligence Track)

Aug 2019 – Dec 2023

- GPA: 3.7 / 4 (Magna Cum Laude)
- Recipient of SCIS (School of Computing and Information Systems) Achievements scholarship
- Dean's List: AY2019-2020 (Year 1), AY2020-2021 (Year 2)

Projects

CoastalClear Jun 2024

- Web application using historical data to predict cleanliness levels of coastlines and coordinate volunteer cleanup efforts
- Nominated as a finalist among 19 teams and underwent further development in an accelerator round

ScamSword May 2023

- Prototyped offensive scam-prevention measures developed in collaboration with Open Government Products (OGP)
- Site inspect analyzes URL, website DOM, and favicon to generate a comprehensive risk report

Scam chat feature facilitates anonymous chat sessions through Telegram APIs

SourC-VM May 2023

- Compiler and virtual machine that targets a subset of the C programming language
- Support for compilation errors, type-checking, conditionals, loops, and stack and heap implementations with visualizations for debugging

Spend Transactions Nov 2021

- Full-stack web application that ingests transactions, processes rewards for credit card expenditure and displays them to users
- Conducted automated infrastructure provisioning with CloudFormation and build releases with Github Actions

Activities

Volunteer at Better.SG Aug 2022 - Present

Providing tech helpdesk and consulting services for nonprofits looking to improve digital workflows

Teaching Roles at Singapore Management University

Jan 2021 - Dec 2022

- Courses: Linear Algebra, Object-Oriented Programming, Computer Hardware and Embedded Systems, DevOps
- Composed practice and review materials to prepare juniors for major programming lab tests

Volunteer Lead at Ground-Up Initiative

Aug 2019 – Sept 2022

- Led and coordinated volunteer participation in the flagship weekend programme, "Balik Kampung"
- Administered digital workflows for volunteer management, knowledge sharing and social media campaigning

Skills

Languages: English, Mandarin (All Native)

Programming: Languages: Python • Java • JavaScript • C • C# • SQL

Web Development: HTML/CSS • ReactJS • Spring • FastAPI • ASP.NET

DevOps: Docker • Kubernetes • AWS • Google Cloud • Azure • Terraform • Gitlab Cl

Data Science & ML Pandas ● Numpy ● Jupyter ● Tensorflow ● Pytorch

Other: Git ● Bash ● Linux/UNIX● LaTeX