Emmanuel Oh Eu-Gene

emmaneugene@outlook.com | Portfolio | GitHub | LinkedIn | Substack

Work Experience

Software Engineering Intern at Fabrica.AI

Python • Docker • ROS • Bash

Oct 2022 - Present

- Developing CI/CD workflow for building, testing and deploying robot software
- Developing feature modules for tile-grouting robot with Robot Operating Software (ROS)

Software Engineering Intern at LUMIQ

JavaScript • Google Apps Script • Kubernetes • AWS

Jun 2022 - Aug 2022

- Reconfigured self-managed plugins to work with updated Kubernetes versions on AWS EKS
- Deployed a Google Apps Script add-on as a proof of concept to make LUMIQ optimizer API accessible from Google Sheets

Software Engineering Intern at Netatech Engineering

JavaScript • Python • AWS • Kotlin

May 2021 – Aug 2021

- Implemented novel resource usage, irrigation schedule and environment data visualizations for the iHydroGarden interface
- Deployed serverless functions for remote device control through with user interactions on the iHydroGarden interface
- Prototyped an Android mobile application with Kotlin and AWS Amplify

Operations Intern at Payboy

Jan 2019 - Jun 2019

- Conducted user acceptance testing (UAT) of software in local, staging and production environments
- Crafted internal documentation, data flow diagrams and API collections for knowledge-sharing and testing

Education

Singapore Management University

BSc Computer Science (Artificial Intelligence Track)

Aug 2019 - Present

- Cumulative GPA: 3.91 / 4 (Summa Cum Laude)
- Recipient of SCIS (School of Computing and Information Systems) Achievements scholarship
- Dean's List: AY2019-2020 (Year 1), AY2020-2021 (Year 2)

Raffles Institution

Singapore-Cambridge GCE A-Level

Jan 2014 - Dec 2015

Projects

Spend Transactions | ReactJS • Serverless • .NET • Docker • AWS

- 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

Ryverbank API | Spring • Docker • Jira

- Built backend REST API with online banking and stock trading features in collaboration with a global investment bank
- Practiced Scrum methodologies in Jira and cloud deployment on DigitalOcean

Extracurriculars

Volunteer at Better.SG Aug 2022 - Present

Active consultant for using no-code software tooling to help beneficiaries improve workflows

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

Teaching Roles at Singapore Management University

Jan 2021 – Dec 2022

- Courses: Linear Algebra, Object-Oriented Programming, Computer Hardware and Embedded Systems, DevOps
- Prepared practices and review materials coding clinics and created practices to prepare mentees for major lab tests

Professional Development Director at SMU Whitehat Society

Jan 2020 - Aug 2020

- Conducted talks and workshops teaching cybersecurity concepts and skills to the student population
- Spearheaded procurement of merchandise and logistics as part of an annual outreach programme for junior college students

Skills

Languages: English, Mandarin (All Native)

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

Web Development: HTML/CSS • React • Spring • ASP.NET • REST APIs

Data Science/AI/ML: Tensorflow ● Numpy ● Pandas

DevOps: Docker • Serverless • Gitlab CI • Kubernetes

Other: Git • LaTeX • Bash • Linux • AWS