Brendan Ang Wei Jie

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Education

Nanyang Technological University 2020-2024

Bachelor of Engineering in Computer Science | Bachelor of Business in Business Analytics

GPA: 4.79/5.0 | Dean's List 2021 Business | Technical Director, Open Source Society

Work Experience

HPE Aruba Networking

Software Firmware Engineer Intern

01/2024 - Present

- Part of the network switch operating system diagnostics team working primarily in **C**.
- Implemented daemon capabilities to verify hardware systems such as EDAC error counts, eMMC function and PCIe switch function.

Beep TechnologiesIoT Engineer Intern

06/2023 - 12/2023

- Core contributor to 2 major versions of an Android IoT payment POS application in Java and Kotlin.
- Built stability features such as power failure recovery and synchronization, reducing production defects by 40%.
- Profiled applications, solving out-of-memory errors and reducing overall memory resource footprint.

Shopee

Software Engineer Intern 08/2022 - 12/2022

- Built and designed features for an automatic script in Go for internal API failure detection, verdict and reporting, helping to increase the failure reporting efficiency for the Order team.
- Detected and coordinated fixes for API bugs, improving UAT environment stability rates from 60% to 90%.

Scoot Full Stack Developer

Intern

05/2022 - 07/2022

- Developed frontend features in **Angular** to allow customers to change flights and review their booking.
- Fixed bugs in API endpoints using .NET C#.

Projects

Emulation Framework for Federated Learning

Final Year Project

Github

Built a framework in C to allow users to bootstrap federated machine learning clients running on emulated hardware with QEMU and ZephyrOS

 Aggregated metrics such as TCP communicating with a central HTTP server.

Semantic Search Plugin

Personal Project

Github

- Built and maintaining a tool in **Rust** and **TypeScript** supporting semantic search for Obsidian.md, a popular note taking application.
- Implemented a simple interface and algorithm allowing users to convert their notes into tokenizable sections, and use OpenAl's embedding API to create embedding vectors for semantic search.

NTU DownDetector Open-Source Society Project

Github - Website

- Led a student developer team of 6 people in building a status reporting and monitoring web application for school services in JavaScript.
- Developed a mvp which allowed students to authenticate, view data charts and report their issues.

Skills