

Tolentino Abner Jr Morales

abner.tolentino@u.nus.edu | +65 84680443 | <https://abnermtj.github.io/>

EDUCATION

National University of Singapore

Aug 2019 - Expected July 2023

- **Major:** B.E Computer Engineering
- **CAP:** 4.79/5.0 (Dean's List A/Y 2021-22)
- **Modules:** SE & OOP, DSA, OS, Networks, Computer Graphics, AI, Game Development

SKILLS

Languages: C, C++, C#, Java, Python, HTML5, CSS, JS, GdScript, Verilog

Technologies: Unity, UWP, Godot, PFIGma, Git, Unix, Yocto, Docker, Vivado, LPCXpresso

WORK EXPERIENCE

Software Firmware Engineer Intern, Hewlett Packard Enterprise

Jan 2022 to Present

- Developing features and tests on Network Operating Systems for Aruba switches in C and Python

Software Engineer Intern, Microtube Technologies

Oct 2021 - Nov 2021

- Developed a data visualizer for Bluetooth sensors in C# using UWP for Windows and Unity for mobile

Teaching Assistant, National University of Singapore

Jun 2021 - Aug 2021

- Managed and guided 5 teams with their Software Engineering projects for NUS Soc Orbital 2021

VSAT Network Operator, 12C4I Battalion

Jan 2017 - Oct 2018

- Deployed and maintained Ku-band VSAT network systems for over 4000 personnel in Wallaby 2018

PROJECTS

Python/C++ Developer, Dance move detector

Aug 2021 – Nov 2021

- Developed a wearable dance move detector that uses supervised machine learning models
- Implemented the Bluetooth protocol between IoT devices in python using bluepy on Ubuntu
- Implemented the reading and processing of IMU and EMG data sensors on Arduino in C/C++

UX Designer, Self-Checkout App

Feb 2021 – April 2021

- Designed a supermarket checkout app to reduce queue times
- Conducted design research like usability tests and contextual interviews to redesign core features
- Created wireframes and high-fidelity prototypes using Balsamiq and Figma
- Awarded Huawei Future Interaction Design Award 2nd Place

Java Developer, Cheatsheet Manager

Oct 2020 – Oct 2020

- Set up CI/CD pipelines using Junit, Gradle and GitHub Actions
- Developed the parsing and behaviour of CLI commands that manage cheat sheets

Game Developer, RPG Adventure Game

May 2020 - Aug 2020

- Designed and implemented gameplay, physics, and software architecture in GdScript on Godot
- Clinched Top 6 of 383 projects in NUS SoC Orbital 2020 for good software engineering

ADDITIONAL INFO

- Interests: Hackathons, Digital painting, Video/Photo editing, Pixel Art