Hazel Hedmine Tan

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EDUCATION

National University of Singapore

Bachelor of Engineering (Computer Engineering) *August 2019 – May 2023*

GPA/CAP *4.37/5.00*

Relevant Coursework *Programming Methodology (Python), Data Structures and Algorithms (C++), Software Engineering and Object-Oriented Programming (Java), C Programming, Computer Architecture (RISC-V), Database Systems (PostgreSQL)*

EXPERIENCE

Product Engineering Intern May 2021 – November 2021

Advanced Micro Devices (Singapore)

- Developed a Graphical User Interface (GUI) tool using Python's Tkinter for Fuse Engineers to generate Fuse Softsetprofiles which improved the efficiency of the bring-up process.
- Enhanced a PowerBI tool by migrating from a local database to a Snowflake server via an internal API and implemented a GUI using Python's Tkinter for standardising user input.
- Spearheaded presentations and discussions on the tools implemented with product engineers.
- Enhanced communication skills through weekly team meetings.

PROJECTS

Augmented Reality Laser Tag System | *Unity, Vuforia Engine, C#, MQTT* January 2022 – May 2022

- Built a 2-player Augmented Reality (AR) laser tag system in a team of 5 by applying hardware and software engineering design principles in designing and implementing a complex embedded system.
- Created a Unity phone application as a visualiser for players that displayed realtime AR gameplay effects such as shields and grenades using Vuforia with C# scripting.
- Practiced software development principles such as user surveys and iterative design to successfully define and deploy the application.
- Utilized MQTT via an open source Unity3d project called M2MqttUnity to receive and send game data between the phone and game server hosted on an Ultra96 FPGA.

UniTracker | *CLI, Java, JUnit, Sourcetree, Markdown* January 2021 – May 2021

- Developed a university organizational tool in a team of 4 using Java on the command line interface.
- Customized and formulated app features, such as a CAP and module tracker, by identifying user needs.
- Implemented the task organization feature for users to categorize, create, delete, pin and update the status of tasks using Object-Oriented Programming in Java.
- Mediated team discussions and learned to handle conflicts in project direction.
- Practiced JUnit testing, build automation tools, code revision tools and breadth-first iterative software development life cycles.

TECHNICAL SKILLS

Languages: Python, C, C++, C#, Java, SQL, JavaScript, HTML, CSS, Assembly (ARM, RISC-V), Verilog
Frameworks/SDKs: React, Node.JS, Express, Jest, JUnit, Vuforia Engine
Database Tools: PostgreSQL, MongoDB Atlas
Developer Tools: Git, Github, VS Code, IntelliJ, Unity, Heroku, MongoDB Atlas, Postman

OTHERS

Languages: English, Korean, Chinese
Co-Curricular Activities: Welfare Head of Electrical and Computer Engineering Club (September 2020 - May 2021)