Hazel Hedmine Tan

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EDUCATION

National University of Singapore

August 2019 - May 2023

Bachelor of Engineering (Computer Engineering)

• GPA/CAP: 4.37/5.00

Relevant Coursework Data Structures and Algorithms, Software Engineering Principles and Patterns, Computer Architecture, Database Systems, Computer Networks, Real-Time Operating Systems

WORK EXPERIENCE

Teaching Assistant

August 2022 - Present

National University of Singapore, School of Computing

- Facilitated the computer engineering capstone project requiring students to set up an AR laser tag system.
- Mentored 3 groups of 5 students and refined project requirements alongside professors.

Product Engineering Intern

May 2021 – November 2021

Advanced Micro Devices (Singapore)

- Developed a GUI with Tkinter to automate the generation of SoftsetProfiles during each bring-up process for new products and wrote user and developer guides.
- Enhanced a PowerBI tool by migrating from a local database to a Snowflake server via an internal API and added a GUI with Tkinter to standardise user input.
- Spearheaded presentations and discussions on the tools with product engineers.

PROJECTS

Elememory | link | React, Chakra UI, NodeJS, MongoDB, Express, Jest, Cypress, ESLint, JWT

- Produced a web application with React and Chakra UI which allows users to make and store digital flashcards.
- Designed a user system with JWT for encryption allowing users to register, edit and delete accounts.
- Implemented the backend utilizing NodeJS and Express to retrieve and store data in MongoDB.
- Executed unit testing using Jest and E2E testing by Cypress.

Augmented Reality Laser Tag System | Unity, Vuforia Engine, C#, AMQP

- Assembled a 2-player AR laser tag system in a team of 5 and focused on the software visualizer component.
- Created a cross-platform mobile application with Unity to display realtime AR gameplay effects such as shields and grenades through Vuforia with C# scripting.
- Utilized AMQP via Unity3D.Amqp, an open source AMQP client library supporting RabbitMQ, to receive and send game data between phone clients and a game server hosted on an Ultra96 development board.

UniTracker $\mid \underline{\text{link}} \mid CLI, Java, JUnit$

- Developed a university organizational tool in a team of 4 using Object-Oriented Programming in Java on CLI.
- Constructed a task organization feature for users to add, update, categorize, delete and pin the status of tasks.
- Practised JUnit testing, build automation tools and breadth-first iterative software development life cycles.

CO-CURRICULA EXPERIENCE

Welfare Department Head

August 2020 - May 2021

NUS Electrical and Computer Engineering Club

- Led a team of 12 to organize ECE shirt sales, bubble tea giveaways and welfare packs for over 1000 students.
- Improved organizational and communication skills by guiding a team and collaborating with 4 other departments.

TECHNICAL SKILLS

Languages: Python, C, C++, C#, Java, SQL, JavaScript, HTML, CSS, Assembly (ARM, RISC-V), Verilog

Frameworks/SDKs: React, Chakra UI, Node.JS, Express, Jest, JUnit, Vuforia Engine, Cypress Tools: Git, Github, VS Code, IntelliJ, Unity, Heroku, Postman, PostgreSQL, MongoDB Atlas

Certifications: Full Stack Open 2022 (Grade 5)

ADDITIONAL INFORMATION

Languages: English (first language), Korean, Chinese