Lim Meng Shin

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SUMMARY

Graduate of Dunman High School with a strong foundation in programming, machine learning, and software development. Proven track record in innovative project execution, published research, and success in competitive programming. Seeking a challenging internship to contribute technical expertise while furthering professional growth.

EXPERIENCE

Intern

Micron Technology **December 2024 - December 2024**

- Collaborated with the Smart Manufacturing and Artificial Intelligence team to understand advanced AI-driven workflows, including developing machine learning models to identify defects in semiconductor wafers. These models analysed high-resolution imaging data to detect anomalies and classify defect types, significantly enhancing manufacturing quality and yield.
- Presented a business case solution to three technical directors, highlighting innovative approaches to improve efficiency in semiconductor manufacturing.

Student Researcher

Singapore University of Technology and Design **April 2023 - November 2024**

- Collaborated with professors to develop an algorithm to identify code plagiarism and distinguish between human and AI-generated code with up to 93% accuracy.
- Presented findings at the 24th Koli Calling International Conference on Computing Education Research.
- Co-authored a research paper available at: https://dl.acm.org/doi/abs/10.1145/3699538.3699569

EDUCATION

A-Level

Dunman High School • Singapore • 2024

- Key Subjects: Computing, Mathematics, Physics, Economics

PROJECTS

Economics Chatbot

February 2024 - June 2024

- Designed and implemented a chatbot to assist students in mastering A-Level Economics concepts.
- Incorporated the Gemini API to process user queries and provide accurate, contextual responses with improved efficiency and scalability.
- Gained over 200 active users during testing, receiving positive feedback for its intuitive interface and depth of content.

Habit Tracker + Task App

February 2024 - April 2024

- Built a Flutter-based app to help users track habits and tasks, featuring a reward system for completed actions.
- Developed a unique analytics feature that visualises user progress using heat maps. This feature helped users identify trends in their habits and tasks over time.

AI Chess Engine

November 2023 - December 2023

- Developed a Python-based chess engine leveraging the Minimax algorithm and Alpha-Beta pruning to improve decision-making speed.
- Added a GUI using PyGame to make the engine accessible and interactive for casual players.

Class Funds Management System

February 2023 - March 2023

- Co-created a website for classmates to manage and view class funds and transactions, improving transparency and efficiency.
- Implemented role-based access control to ensure secure updates by authorised users only.
- Streamlined fund management processes, enabling the class secretary to efficiently update and manage class funds for purchasing notes.

Damegue

January 2022 - October 2022

- Built a Python and Flask-based website that predicts dengue risk and cases using AI and machine learning techniques.
- Integrated real-time data from public health sources like NEA (National Environment Agency) to provide accurate and up-to-date predictions.

Recipely

Swift Accelerator Programme • October 2020 - December 2020

- Developed an iOS recipe app using Swift, providing a seamless solution for finding new recipes.
- Designed a unique search feature that allows users to filter recipes by food intolerances and dietary preferences, saving time and reducing food waste.
- Implemented features such as a healthiness score for recipes, estimated cooking time, an in-built timer, and integration with HealthKit, enhancing the ease and efficiency of following recipes.
- Published app on the Apple App Store, receiving multiple glowing reviews for its usefulness and ease of use.

ACHIEVEMENTS

2nd Runner Up in BrainHack TIL-AI

Defence Science and Technology Agency • 2024

- Developed an AI solution to interpret spoken commands and control an air defence turret system, emphasising precision and efficiency in execution.

Silver Award in the National Olympiad in Informatics

National University of Singapore • 2024

- Solved complex algorithmic problems under time constraints, demonstrating exceptional problem-solving and coding skills.
- Ranked among the top participants nationwide.

Silver Award in the Singapore Physics League

Institute of Physics Singapore • 2024

- Collaborated in a team to solve advanced physics problems, focusing on creativity and analytical thinking.

Gold Award in BEBRAS

SIMCC • 2023

- Excelled in tasks requiring logical reasoning and computational problem-solving, achieving 5th place globally.

Engineering and Tech Programme Scholarship

Ministry of Education, Singapore • 2023

- Awarded for outstanding performance in STEM subjects and a demonstrated passion for technology.

INVOLVEMENT

Member

Dunman High School • Infocomm Club • March 2023 - June 2024

- Participated in coding competitions and tech workshops, honing programming and teamwork skills.

Member

School of Science and Technology, Singapore • SST Inc. • July 2019 - May 2022

- Developed software solutions for school events and internal projects, gaining hands-on experience in project management.

Committee Member

School of Science and Technology, Singapore • Robotics @APEX • January 2019 - May 2022

- Organised, facilitated and competed in robotics competitions, fostering a strong interest in robotics among Robotics @APEX members.

Participant

Tinkercademy • Swift Accelerator Programme • April 2020 - December 2020

- Collaborated with peers to develop iOS applications, learning industry-relevant skills and best practices.

SKILLS

Soft skills: Adaptability, Creativity, Critical thinking, Problem-solving, Teamwork

Programming: C, C++, Dart, Python, JavaScript, Swift, SQL

Technical skills: Machine Learning, Data Analysis, Excel, Web Development (HTML, CSS)

Frameworks: Flutter, Flask