

# Lee Tze Wei, Alex Joel

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## EDUCATION

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### Singapore University of Technology and Design (SUTD) Sep 2020 to Present

- Bachelor of Engineering (Computer Science and Design)
- Cumulative GPA: 4.83/5
- Expected date of graduation: April 2024

## WORK EXPERIENCE

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### SUTD CampusX Project, Developer Dec 2022 to Present

- Planned and coded the frontend for the ongoing SUTD redevelopment program, which provided invaluable analytical tools for faculty, receiving praise from the Minister of Education.

### Teaching Assistant, 50.002 Computation Structures Jan 2023 to Present

- Advised and guided students undertaking the module by providing in-depth assistance and tutorage.

### Teaching Assistant, 10.020 Data Driven World Sep 2022 to Dec 2022

- Provided assistance to students taking SUTD's introductory programming module.
- Helped clarify students' doubts with regard to Python programming, algorithmic thinking, and debugging and problem-solving skills.

### AhLinc Food Delivery Bot, Lead Software Engineer

- Developed a Telegram bot for an NTU food delivery service to collate orders, handle monetary transactions and scheduling, simplifying the workload of the service provider.

### National Service Battalion Casualty Station Loan Management System Apr 2018 to Jan 2020

- Conceptualized and maintained a management and tracking system for the loaning of SAF medical equipment, which helped to streamline office processes and ultimately gained praise from the division superiors.

## ACADEMIC PROJECTS

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### Hotel Booking Site May 2022 to Aug 2022

- Designed and implemented a hotel booking site to fulfil the project criteria of our client for 50003 Elements of Software Construction using React, FastAPI, and SQL, garnering praise from said client.

### Online Hate Speech Classifier May 2022 to Aug 2022

- Implemented and trained Categorical Boosting Classifier to tackle the problem of detecting online hate speech, achieving >70% accuracy.

### Automated Grading Tools for Digital Assignments, Researcher May 2022 to Present

- Developed a modular Telegram bot to collate and automatically grade students' submissions, greatly reducing the workload of the faculty.
- Designed a real-time feedback platform to increase student-faculty interaction and received extremely positive feedback from both parties.

### Development of RISC hardware as Pedagogical Tool, Researcher May 2022 to Present

- Designed FPGA implementation of RISC computer taught as part of syllabus for use as teaching tool, aiding future batches in better learning the content via hands-on experiences.
- Designed emulation implementation in Python alongside FPGA implementation to reduce compile time during debugging process, greatly improving student satisfaction during project work.

**SHaME (Faculty / Student Scheduling App)****Jan 2022 to May 2022**

- Ideated a scheduling app to tackle the problem of coordinating deadlines between different modules
- Designed an Android app that allowed faculty to post deadlines and track how many students have completed it, with an option to update said deadline if necessary.

**Point Cloud Generative Adversarial Network (GAN), Researcher****Jan 2021 to Aug 2021**

- Researched point cloud GANs and implemented a model using TensorFlow in Python to classify point cloud data.

**AWARDS**

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**SUTD Honours List for Junior Terms (2022)**

- Attained the Honours List Award for being in good academic standing throughout Junior Terms

**SUTD Computation Structures Awards (2022)**

- Received the Computation Structures Award for being first in cohort for 50.002 Computation Structures

**SUTD Honours List for Freshmore Terms (2021)**

- Attained the Honours List Award for being in good academic standing throughout Freshmore Terms

**CO-CURRICULAR ACTIVITIES**

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**SUTD Open House Volunteer****Feb 2023**

- Assisted SUTD with their annual Open House event by guiding attendees and manning the registration booths, which helped to contribute to an extremely successful event.

**SUTD Open House Volunteer****Feb 2022**

- Provided on-the-ground guidance and ushering services during SUTD's Open House event, to ensure a smooth flow of events during the day.

**Interim Head-of-Tech for Cuesports 5<sup>th</sup> Row****Sep 2021**

- Handled day-to-day matters of the new Head-of-Tech role while looking for an official replacement.
- Worked closely with the president of the club to implement a Telegram bot to automate registration for trainings, greatly improving signup rates and member satisfaction.

**ADDITIONAL INFORMATION**

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**Skills**

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| <ul style="list-style-type: none"><li>• Python (Django, FastAPI, Flask, Keras, NumPy, Pandas, python-telegram-bot, Scikit-learn, SQLAlchemy, Tensorflow)</li></ul> | <ul style="list-style-type: none"><li>• HTML / CSS</li></ul>                                       |
| <ul style="list-style-type: none"><li>• C / C++</li></ul>                                                                                                          | <ul style="list-style-type: none"><li>• Javascript (React, Next.js, Node.js, Express.js)</li></ul> |
| <ul style="list-style-type: none"><li>• Java</li></ul>                                                                                                             | <ul style="list-style-type: none"><li>• Git</li></ul>                                              |
| <ul style="list-style-type: none"><li>• SQL</li></ul>                                                                                                              | <ul style="list-style-type: none"><li>• 3D Printing</li></ul>                                      |
|                                                                                                                                                                    | <ul style="list-style-type: none"><li>• OpenGL</li></ul>                                           |