# Lee Chang Zheng

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#### **EDUCATION**

# Singapore University of Technology and Design (SUTD)

Singapore

• Bachelor of Engineering (Computer Science and Design) with Honours with Distinction

Sep 20 to May 24

• GPA 4.00/5.0

Date of graduation: 28 May 2024

### WORK EXPERIENCES

### **Keysight Technologies**

Singapore

Singapore

## Software Quality Assurance Tester, Summer Internship

Aug 22 to Dec 22

- Restructured and created over 80 new automated quality assurance test scripts for Keysight's PathWave Manufacturing Analytics system using Eggplant, an AI-driven test automation tool.
- Documented bugs and presented them to the team through Notion, providing possible solutions to bugs and feedback on improving user experience.

#### ACADEMIC RESEARCH PROJECTS

### Singapore University of Technology and Design (SUTD)

Singapore

## 3D Printing to support Medical Education and Clinical Procedural Skills

May 21 to Aug 22

- Spearheaded the development of the liver model and the physical prototype.
- Co-author of a published paper in Science Direct on affordable and accessible 3D printed models of the liver to support medical education.

#### **OTHER PROJECTS**

#### TikTok TechJam 2024 (Hackathon)

Singapore

## Automated video dubbing using Deepfake technology - DubTok

Jul 24 to Jul 24

- Spearheaded the development of the backend using FastAPI and SQLite.
- Integrated backend with AWS S3 for storage of uploaded videos and the audio dub tracks.
- Developed Python scripts to perform extraction, transcription and translation of audio from video files.

#### Singapore University of Technology and Design (SUTD) Audio deepfake detector – Veritas

**Singapore** 

Apr 23 to Apr 24

- Designed and developed the front-end webpage using Next.js.
- Assembled data and trained the VeritasSG model, which is a model tailored for detecting Singaporean English deepfakes.
- Assisted teammates in getting the models to run by resolving errors with the model, documenting the steps to overcome the errors.

#### Singapore University of Technology and Design (SUTD)

Singapore

# Heart rate monitoring using cloud infrastructure - Vital Watcher

Sep 23 to Dec 23

- Conceptualised the project architecture design and the cloud services to employ from AWS.
- Established the cloud connection to the ESP32 using MQTT in AWS IoT Core and coded the logic for retrieving and updating heart rate data to the AWS S3 in AWS Lambda.

## Singapore University of Technology and Design (SUTD) Keyword to sentences deep learning model

Singapore

Implemented the Text-to-Text Transfer Transformer model to convert keywords to sentences.

• Curated and pre-processed dataset for fine tuning the models using a NLP text analysis tool.

# Singapore University of Technology and Design (SUTD)

**Singapore** 

# Multiplayer game made using FPGA – Finger Death Machine 5K

Mar 22 to Apr 22

Feb 23 to Apr 23

• Spearheaded the development of the game and programmed the logic of the game.

• Planned the direction of the game and conceptualized the main idea of the game.

#### Singapore University of Technology and Design (SUTD)

Singapore

# Android mobile application for trading used books – Book4Book

Feb 22 to Apr 22

- Designed the user profile page for the application and user flow of the application.
- Programmed the application and connected the homepage to the backend.

#### ADDITIONAL INFORMATION

• Programming languages: Python, Java, Scala, HTML5, CSS, JavaScript, C