# Keon Hee (Matthew) Lee

leekeonl.github.io | leekeonl@sfu.ca | https://github.com/leekeonl | ca.linkedin.com/in/leekeonl

# **Technical Proficiency**

- Programming Language: Java, Python, C++, C, Swift, Javascript, SQL
- Tools / Frameworks: Git, Bootstrap, Eclipse, Xcode, Command Line

# **Experience**

#### Teaching Assistant at SFU, Burnaby, BC, CA

May 2020 to August 2020

- Instructed Introduction to Computing Science and Programming I & II and Data Structures and Programming
- Directed students with C++, C, and Python and using tools Xcode and Command Line
- Provided assistance to students with learning data structure and algorithms, and helped debugging problems
- Worked closely with professors to discuss teaching and improve course material

### Teaching Assistant at SFU, Burnaby, BC, CA

May 2019 to August 2019

- Taught Introduction to the Internet and the World Wide Web, using Javascript, HTML, CSS
- Trained and assisted students with creating and designing websites
- Accommodated weekly office hours to answer questions from students related to assignments and concepts
- Held weekly meetings with a professor to report students' progress and discuss improvement to the course

### Software Developer Intern at PCT co. LTD, Seongnam, Gyeonggi-do, South Korea

May 2017 to September 2017

- Worked on a project called Tactile WRITER that translates image to braille for blind people
- Improved image processing by 15% by implementing multi-threading using Python
- Troubleshot deadlock by using Python profiler to figure out where it is caused
- Initiated test plans and implemented test automations using pytest
- Used: Python, MySQL, Git, PyCharm, AWS S3

# **Project**

### Load Balancer

- Implemented load balancing algorithms (round robin, least connections, weighted RR/LC, etc) and created unit tests
- Used: Python, Docker, Flask, pytest

#### Tetris

- Implemented iOS version of Tetris (runs on Mac, iPhone and iPad) that mainly divides into function which covers all the edge case (rotate, move, stop etc) and built user friendly interface
- Used: Swift

#### Chess Ai

- Implemented Chess game (OOP) which can play with both User and AI which parts contains Chess Processing, GUI and AI that has observer pattern which updates every moves etc
- Used: Python, pygame

## Education

### Simon Fraser University

Bachelor of Science, Mathematic and Computing Science (Class of 2021)

Sept 2016 - Present

- Courses: Data Structure and Programming, Computer Linear Algebra, Computer Calculus, Mathematic and Computation Permutation Puzzle, Algebra: Ring and Field, Coding Theory. Computer Algebra
- Languages: Python, C, C++, MATLAB, Maple
- On Dean's Honour Roll (Summer 2020 and Spring 2020)