<u>LAU</u> KAR RUI

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https://karrui.github.io/ https://github.com/karrui

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EDUCATION

Bachelor of Computing (Honors) in Computer Science

Singapore

National University of Singapore (Expected Graduation 2020)

2017 to current

CAP: 4.35 / 5.00

Diploma in Business Administration

Singapore

Singapore Polytechnic

2010-2013

GPA: 3.83 / 4.00

PROJECTS

iungo

Java Desktop App

A desktop address book application

- Software lead for team of 3 for project using Agile development, in charge of code and tests reviews
- Written in Java, and JUnit 4 for testing
- https://github.com/CS2103AUG2017-F11-B3/main

Taskrr

Full Stack Web App

A task matching web application where users can post tasks or offer bids for completing tasks for monetary compensation

- Lead developer of a team of 3 for the front-end of application, ensuring good code structure and modularization
- Ensure RESTful naming conventions
- Implemented framework for easy PostgreSQL query execution
- Written in JavaScript, Node.js, Express.js, jQuery, Bootstrap 3, with PostgreSQL as backend database
- https://github.com/karrui/taskrr

Chope God

iOS Swift App

Proof of concept application where users can reserve seats or meeting rooms and use their phones to see if the spot is reserved

- Application **won "Top 8"** for Hack & Roll 2018, the largest student-led hackathon in Singapore
- Implemented AR function and set up the Firebase backend
- Written in Swift, using ARKit with Firebase as backend database

AI Tetris Bot Java Desktop App

A desktop application where an AI plays Tetris without human input

- Implemented various heuristics for machine training
- Wrote the entire Particle Swarm Optimization algorithm
- Managed to achieve 1 million rows of tiles cleared in 24 training iterations
- Maintained OOP and ensured modularization of code
- Written in Java

EXPERIENCE

Teaching Assistant (Introduction to Software Engineering, CS2103)

Jan 2018 - May 2018

National University of Singapore School of Computing

- Review student's weekly progress on their GitHub pull requests
- Topics discussed: OO system analysis, modeling and design, implementation, testing, software engineering principles, forming test cases

SKILLS

Languages: Java, C, Swift, SQL, HTML/CSS

Technologies: git, Node.js, Express.js, jQuery, PostgreSQL, JUnit, Firebase