Ronan A. Konishi

Personal Website: ronankonishi.github.io

linkedin.com/in/ronan-konishi • github.com/ronankonishi • rkonishi@ucsd.edu

SUMMARY OF QUALIFICATIONS

- Developed and Maintained Web and Mobile Applications for Qualcomm Institute – UCSD Division of Calit2
- Developed Parser for Japanese TV Show Most Common Words using Web Scraping in Java
- Developed Blog Page with CRUD Functionalities and User Authentication in Laravel/PHP
- Developed my Favorite Childhood Video Games in Java
- Implemented thread system, system calls and multiprogramming support for nachOS (Operating System) in Java
- Created Huffman Encoding File Compressor and Graph-Based Relationships Projects in C++
- **Technologies used:** Java, Laravel/PHP, Python, C, C++, HTML5, CSS, Javascript, MySQL, SQL, React.js, Node.js, Android, ARM Assembly, AWS, Machine Learning

EDUCATION

University of California San Diego   **Anticipated** June 2022
Bachelor of Science in **Computer Science, GPA 3.89**

WORK EXPERIENCE

Software Developer, Qualcomm Institute – UCSD Division of Calit2   (10/2018 – current)
- Developed Event Logging Data Infrastructure System consisting of an API to Log and Retrieve Data and a Spreadsheet-Style User Interface in Laravel/PHP
- Developed Authenticated API System that Organizes Accessibility of AWS S3 Data for Users in Laravel/PHP
- Developed Android App with 3D Camera for Face Mesh Rendering and Eye Measurement Calculation for Fetal Alcohol Syndrome Disorder (FASD) Detection in Java/Android
- Developed Survey (Website) for Doctors to Record FASD Severity Thresholds using Video Scrubbing in Laravel
- Updated Jupyter Notebook for FASD Detection Project to run Machine Learning Models on New Data in Python
- Updated UCSD Veterans Affairs app with new Database Migrations, API methods, and UI in Laravel/PHP
- Ran a Suite of Tests for Government Networking Software and provided feedback.

INDIVIDUAL PROJECTS

Japanese Transcript Parser, Web Scraper, Java   (6/2020 – current)
- Developed Parser for Japanese TV Show Most Common Words using Web Scraping in Java
- Automates Scaping and Extracting Transcript File from TV Show title and Collecting Common Words from File

Ronankonishi.tk, Blog Website   (6/2019 – 12/2019)
- Developed Blob Website with User Authentication, CRUD functionalities, and Responsive UI
- Used Laravel, PHP, HTML, JavaScript, CSS, Bootstrap, AWS EC2, Apache, MYSQL, and SQL

Project Recreate, Recreate Video Game in Java   (12/2019 – current)
- Recreated Super Mario Bros Level 1 in Java
- Recreate Tic Tac Toes using Observer Design Pattern and Swing Library in Java

COURSE PROJECTS

- **NachOS:** (Java) Implemented thread system [join, locks, condition variables, and sleep], system calls, and multiprogramming support [virtual memory]
- **Gomoku AI:** (Python) Built AI for playing Gomoku [simpler version of Go] using Monte Carlos Tree Search Algorithm
- **Walk Walk Revolution:** (Android) Built Android Fitness App using Google Fit API that tracks daily steps, walking sessions [routes, step counts], create teams for multi-user walk sessions [implemented with Cloud Firestore]
- **Huffman Encoding File Compressor:** (C++) Implemented Huffman Encoding-Based File Compression and Decompression Program using Bitwise I/O and an Efficient File Header
- **Graph-Based Relationships:** (C++) Path Finder [BFS, Dijkstra's Algorithm], Optimal Spanning Path [Kruskal's Algorithm] for finding various relationships between data
- **MyGrep:** (C, ARM Assembly) Developed Program that works similarly to the Unix command grep with flag options.