

Ronan A. Konishi

Personal Website: ronankonishi.github.io

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

SUMMARY OF QUALIFICATIONS

- Developed Event Logging Data Infrastructure System consisting of an API to Log and Retrieve Data and a Spreadsheet-Style User Interface using Laravel/PHP, HTML, CSS, Javascript, and MySQL
- Developed Dynamic Key-Value Database System allowing creation of tables through API calls in Node.js and Python
- Prototyped Vulnerability monitoring system using NIST database for Windows Systems in Python
- Built UI for entering CSV Data Set File and backend code for Parsing the CSV file in Python and Laravel/PHP
- **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 **3.891**

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 Dynamic Key-Value Database System allowing creation of tables through API calls in Node.js and Python
- Prototyped Vulnerability Monitoring System using NIST database for Windows Systems in Python
- Built UI for entering CSV Data Set File and backend code for Parsing the CSV file in Python and Laravel/PHP
- Prototyped Phone Application for improving Death Registry Entry System for doctors using VoiceXML
- Developed Survey (Website) for Doctors to Record FASD Severity Thresholds using Video Scrubbing in Laravel
- Developed Android App with 3D Camera for Face Mesh Rendering and Eye Measurement Calculation for Fetal Alcohol Syndrome Disorder (FASD) Detection in Java/Android
- Updated Jupyter Notebook for FASD Detection Project to run Machine Learning Models on New Data in Python
- Ran a Suite of Tests for Government Networking Software and provided feedback.

INDIVIDUAL PROJECTS

Ronankonishi.tk, Blog Website

(6/2019 – 12/2019)

- Developed Blog Website with User Authentication, CRUD functionalities, and Responsive UI
- Used Laravel, PHP, HTML, JavaScript, CSS, Bootstrap, AWS EC2, Apache, MYSQL, and SQL

Super Mario Bros, Recreate Video Game in Java

(12/2019 – current)

- Recreated Super Mario Bros Level 1 in Java

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

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.