

RONALD CHHUA

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EDUCATION

Computer Science (B.S.) Senior - University of California, Santa Cruz.

Sept 2018 - June 2022

EXPERIENCE

Research Assistant/Frontend Developer - GUI Lab

February 2021 - Present

- Utilizing Vue CLI and Vuex to develop a web-based Multithreading project simulator
- Building features through Vue/JS components and developing forms for user interaction
- Working with a group of graduate students, code reviews, resolving git issues

Harvest Sacramento Data Analyst

October 2017 - April 2018

- Tabulated members' site dimensions, harvesting data, and community events held at different locations
- Extrapolated seasonal projections from various community events and seasonal product availability
- Ensure customer availability before big events and curated necessary items for leaders on harvesting

SKILLS

Languages: Java, C, C++, Python, JavaScript, SQL, HTML/CSS

Software: Windows, Linux, Git, VS Code, Eclipse

Technologies: Node.js, PyTorch, Vuejs, Bulma CSS, Django, MongoDB, PostgreSQL, Expressjs

PROJECTS

Tesseract Image Text Translator (OCR)

August 2020

- Developed in Java using a Maven build, Tess4J, and Google Cloud Translation API
- Makes API calls to Tess4J for OCR and then uses Google Cloud Translation
- Prompts a transparent JWindow overlayed over the images with text to be translated
- Improved text quality with OpenCV, resulting in a more accurate and detailed OCR

Genetic Pathfinding Simulator

July 2020

- Java program that imposes natural selection on finding paths between a starting and ending location
- Uses angles and distances as movement vectors and multithreading to depict particles in GUI
- Optimized the pathfinding using distanced-based fitness resulting in fewer computed generations
- Implemented obstacles to generate complex paths and form intricate pathfinding

Image Scrapers

December 2019

- Node.js applications using Puppeteer for HTML rendering and DOM manipulation
- Scrapes images from public sharing websites using specified CSS Selectors
- Uses Reddit API, Snoowrap, and Pushshift for receiving data specifically from Reddit

Website/Webpage Archiver

February 2021

- A SPA built with Vuejs for sending HTTP methods, Expressjs for the server, PostgreSQL for storage
- Server sends SQL queries to the database to service Axios requests
- CRUD Application where users can archive/view/edit websites in a user-friendly display.

ADDITIONAL

Summer STEM Tutor (William Land) - 500+ hours

June-Aug 2016 | June-Aug 2017

Functional/OOP Tutor and Grader - 50+ hours

Jan-March 2021 | April-June 2021