

RONALD CHHUA

<https://ronchhua.github.io/>

+1 (916) 833-0352 ♦ ronchhua321@gmail.com

EDUCATION

University of California, Santa Cruz, (UCSC)

Bachelors of Science in Computer Science

Sept 2018 - June 2022

GPA: 3.48

EXPERIENCE

Software Application Developer

CUNA Mutual Group

June 2021 - Present

- Mapped XSLTs to queries with Microsoft SQL Server to process MDFs
- Will be working with C#, .NET CORE, Microsoft Azure, etc
- Working with a SCRUM-based team to manage PBIs and features

Front-End Web Developer Assistant

UCSC GUII Lab

February 2021 - Present

- Utilizing Vue CLI, Vuex, Web Apis to develop a research/web-based Multithreading simulator
- Building features through Vue/JS components, resolving github tickets, maintaining code base
- Black-box testing front-end components using Jest and Vue Test Utils

Harvest Sacramento Data Analyst

October 2017 - April 2018

- Tabulated site dimensions, harvesting data, and community events in Excel and Word
- 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 | C++ | Python | JavaScript | SQL | HTML/CSS

Software and Tools: Windows | Linux | Git | Docker | VS Code | Postman | Eclipse

Frameworks: Node.js | TensorFlow | Vuejs | Expressjs | PostgreSQL | Docker

PROJECTS

Replicated Fault-Tolerant KVS

April 2021

Node.js | Express.js | Python | Docker

- A causally consistent KVS supporting HTTP requests through Express endpoints
- Metadata (VCs) propagation and broadcasting are implemented for data replication and causal consistency
- Tested KVS, Replicas, etc through requests sent by python scripts

Tesseract Image Text Translator (OCR)

August 2020

Java | Maven | Tess4J | GCP Translation

- 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

VOLUNTEER/POSITIONS

Summer STEM Tutor (William Land) - 500+ hours

June-Aug 2016 | June-Aug 2017

UCSC Programming Tutor/Grader - 100+ hours

Jan-March 2021 | April-June 2021