Ronald Chhua

https://ronchhua.github.io/

EDUCATION

University of California, Santa Cruz

Bachelors of Science in Computer Science

Sept 2018 – June 2022

Mobile: +1 (916) 833-0352

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GPA: 3.48

EXPERIENCE

Software Application Developer Intern

June 2021 - Present

CUNA Mutual Group

Madison, WI

- Created SQL extract processes using Microsoft SQL Server from mapped XML/XSLT data feeds to queries
- Resolved 20% of security risks in life applications and generated static scans through Veracode
- Deployed and created releases in several pipelines to several environments using Azure DevOps
- Implemented API endpoints for .NET Core applications and converted application logging to HTTP requests

Web Developer and Research Assistant

February 2021 - Present

Game User Interaction and Intelligence Lab

Santa Cruz, CA

- Utilizing Vue.js and Web Apis to develop a research/web-based Multithreading simulator
- Developed Vue components with Javascript and designed visual modifiers through elements and SVGs
- Reviewed and resolved bugs through unit testing with Jest mocking and Vue Test Utils
- Resolved github tickets for adding new features and researched new implementation details

Harvest Leader and Data Analyst

October 2017 - April 2018

Harvest Sacramento

Sacramento, CA

- 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

TECHNICAL SKILLS

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

Software/Tools: Windows, Linux, Git, Docker, VS Code, Postman, Visual Studio, Microsoft Azure

Frameworks: Node.js, TensorFlow, Vuejs, Express.js, PostgreSQL, Docker, Scrum

PROJECTS

$\textbf{Distributed Fault-Tolerant KVS} \mid \textit{Node.js}, \textit{Express.js}, \textit{Python}, \textit{Docker}$

 ${\rm April}\ 2021$

- A causally consistent KVS supporting asynchronous HTTP requests through Express endpoints
- Metadata (VCs) propagation and broadcasting are implemented for data replication and causal consistency
- Created replicated KVS through Docker containers and tested replicated state through python scripts

Image To Text Translator | Java, Maven, Tess4J, GCP Translation

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 | Java, Swing

May 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** Programming Languages Tutor and Grader - **100+ hours** June-Aug 2016 | June-Aug 2017 Jan-March 2021 | April-June 2021