Jaehoon Song

(949)-554-9130 | jaehoos1@uci.edu | linkedin.com/in/hoonman | github.com/hoonman | jaehoonsong.com

EDUCATION

University of California, Irvine

Irvine, CA

Bachelor of Science in Computer Science, GPA: 3.77

Expected 2025

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL (mySQL), JavaScript, HTML/CSS, R

Frameworks: React, Node.js, Flask, JUnit

Developer Tools: Git, Docker, Qt, Google Cloud Platform, IntelliJ, AWS, Maven, Tomcat, Linux

Libraries: pandas, NumPy, Matplotlib

EXPERIENCE

CodeCheck CTI-CodeDay SWE Micro-Internship

Oct. 2023 - Dec. 2023

Remote

 $CTI ext{-}CodeDay - Open ext{-}source Project Internship}$

- $\bullet \ \ Collaborated \ with \ 2 \ interns \ to \ enhance \ \underline{\textbf{CodeCheck}}, \ an \ autograder, \ with \ a \ JavaScript \ UI \ and \ AWS \ backend$
- \bullet Optimized the Javascript code editor for long texts by implementing a responsive expand/collapse button (PR)
- Encapsulated the button component creation in a helper function, generating HTML elements and event handlers

Coding Instructor

Mar. 2023 – Sep. 2023

The Coder School

Irvine, CA

- Educated K-12 students various high-level programming languages such as Python and C++
- Tailored exclusive coaching and geared students with creative app-dev skills, debug methods, and OOP concepts
- Innovated a project template used for providing learning objectives for future students (List of Projects)

Software Development Research Assistant

Jun. 2021 – Sep. 2021

UCLA - Laboratory for Embedded Machines and Ubiquitous Robots

Los Angeles, CA

- Improved the user interface for <u>RoCo</u>, an Origami generator for the web with Django and Flask
- Collaborated with 5 research members for demonstrating communication between Origami robots with Lidar camera detection

Projects

Fabflix | Java, MySQL, JDBC, RESTful APIs, javascript, jQuery, AWS, Android

Sep. 2023 - Present

- Developed a comprehensive, full-stack architecture for a movie database web application from the ground up. Setup AWS instance, MySQL, Tomcat, imported a large database of movie information
- Implemented a large frontend using javascript, jQuery, and ajax while administering the same functionality in an Android app using the same backend API
- Comprised features such as cart checkout backed by sessions, secure login, full-text search and auto-complete, bot detection, and protection against SQL injection attacks

Analysis and Visualization of CIFAR-10 | Python, Scikit-learn, PyTorch, Matplotlib Jan. 2023 – Jun. 2023

- Used machine learning classifiers and found PyTorch's CNN to deliver the most accurate CIFAR-10 predictions
- Trained and tuned hyperparameters of kNN, Logistic Regression, Multi-layer Perceptron, and cNN
- Plotted confusion matrices and error rates against hyperparameters for each classifier to evaluate performance

Venus-Lingo | Google Translate API, GCP, Firebase, HTML/CSS, Next.js, Node.js, Javascript, Git May 2023

- Used the Google Translate API to translate and provide the definitions of words with the Chrome extension
- Collaborated with 3 hackers to build the website using Next.js/Node.js and storage system with Firebase

Graphics Modeler $\mid C++, Qt, UML, Doxygen, Scrum, Agile, Git$

Jun. 2022 – Aug. 2022

- Co-led a group of 9 to create a shape-drawing app that can draw, add, delete shapes on a x-y coordinate system
- Implemented the shape hierarchy class, created the custom-made vector class, designed the shape-drawing GUI interface, optimized the functionality to move shapes using overloaded virtual functions
- Documented and tracked the progress using Agile, organized UML diagrams, and ran Doxygen for documentation