Aaron Geesink

Education

Master of Science (M.S), Computer Science

Riverside, CA

University of California, Riverside; GPA: 3.97

September 2022 - June 2023

Bachelor of Science (B.S), Computer Science

Riverside, CA

University of California, Riverside; GPA: 3.98; Summa cum laude

October 2020 - June 2022

Relevant Coursework: Software Engineering, Software Testing, Machine Learning, AI, Web Development, Embedded Systems, Databases, Data Mining, Computer Security, Algorithms, Data Structures, Virtual Reality

Experience

UC Riverside Riverside, CA

Software Engineering Teaching Assistant

September 2022 - June 2023

- Created 10 weeks of lecture material on C++, Agile, UML, Refactoring, SOLID principles, and version control
- Taught students how to test software using Continuous Integration, GoogleTest, Code Coverage, and Valgrind
- Provided feedback on 40+ GitHub software projects for 400+ students
- Obtained the Outstanding Teaching Assistant Award, given to the top 5% of TAs each year at UCR

UC Riverside Riverside, CA

Algorithms Tutor

October 2021 - June 2022

- Debugged C++ code for greedy algorithms, dynamic programming, graph problems, and recursion
- Helped college students design algorithms using recursion, randomization and divide-and-conquer techniques

Horita Capistrano Beach, CA

Embedded Systems Technician

February 2019 - March 2021

- Manufactured 300+ units of SMPTE time code equipment and video equipment
- Assembled **embedded systems** based on PCB schematics
- Tested hardware using multi-meters and oscilloscopes to ensure strict quality control

Codespeak Labs Irvine, CA

Programming Coach

October 2018 - November 2018

- Taught computer science fundamentals to elementary school students
- Helped students program in **JavaScript** and Scratch

Projects

 $\mathbf{TypeFight} \mid \mathit{JavaScript}, \; \mathit{React}, \; \mathit{Node.js}, \; \mathit{Express.js}, \; \mathit{MongoDB}$

github.com/AaronGeesink/TypeFight

- Created 6 React web pages for a speed-typing game with user profiles, global rankings, commenting, and follower lists
- Developed Back-end Node.js server using Express.js to handle HTTP requests and MongoDB to store data

Dungeon Designer | C++, GoogleTest, Valgrind

github.com/AaronGeesink/Dungeon-Designer

- Used C++ and CMake to develop 18 OOP classes using 3 design patterns
- Created 50+ GoogleTest test cases and used Valgrind to eliminate memory leaks

UCR CompSci Discord | Python, Javascript, React, Next.js, Vercel, JSON

ucr-cs.vercel.app

- Developed a Python Discord bot to manage server activities for a community of 1700+ UCR students
- Deployed a React website for the server using Next.js, GitHub and Vercel

Verne | C#, Unity, Oculus SDK

chatmansave.itch.io/verne

- Used Unity, C#, and Oculus SDK to create 4 modules that teach Virtual Reality concepts in VR
- Created 60+ pages of project specifications and design documents using Agile methodologies

Technical Skills

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

Developer Tools: Git, Github, VSCode, GoogleTest, Mocha, CMake, Valgrind, Unity, Qt, Linux, Figma, Maven

Technologies: React, Node.js, Express.js, MongoDB, REST API, Oculus SDK, scikit-learn