

# Charan Karthik

Full-Stack Software Engineer

secharank@gmail.com

(916) 849-6109

[LINKEDIN](#) | [GITHUB](#)

## EDUCATION

**Coding Dojo**, Full-Stack Software Development Certificate (w/ Highest Honors)

June 2022 - Sep 2022

**University of California Davis**, B.S. in Neuroscience (GPA: 3.6)

Sep 2018 - Mar 2022

## TECHNICAL EXPERIENCE

**Coding Dojo | Scrum Master**

Sunnyvale, CA | **July 2022 - Sep 2022**

- Led multiple teams of 4-5 developers through the AGILE development of their portfolio projects
- Facilitated resolution of blockers by coordinating with other Scrum masters and encouraging developers to pair program

**UC Davis | Computer Science Teaching Assistant**

Davis, CA | **Mar 2022 - June 2022**

- Performed code reviews for student assignments and mentored in achieving points for “best programming practices”
- Provided more detailed and advanced coverage of class material by breaking down complex CS topics such as OOP, data structures, and algorithms into visual and relatable examples, leading to an average increase of 1/3 of a letter grade

**AnimeFrost (formerly AnimeSetsu) | Web Developer**

**July 2014 - Mar 2017**

- Refactored back-end site structure by merging dubbed and subbed collections, which increased site search speeds by 52%
- Tripled site interactivity by adding the ability to populate a collection of suggested anime, filter anime selections by genre, popularity, and animation studio, and enabling site-specific user accounts to track ratings, comments, and custom watchlists

## SOFTWARE PROJECTS

**PortfolioTrakr** | [GitHub Demo](#)

**Tech Stack:** Python, Flask, MySQL, Jinja2

*A website to intuitively track and centralize your entire investment portfolio.*

- Integrated Finnhub Stock API to fetch and store the current stock price in a relational database for quick and easy access
- Optimized database design to minimize API calls and follow ‘DRY’ code principles which increased site performance by 43%
- Followed AGILE methodology by outlining project goals with Balsamiq wireframes, tracking user stories and progress with Trello/Notion, and quickly iterating on change requests

**Fireteam Finder** | [GitHub Demo](#)

**Tech Stack:** Java, Spring/Spring Boot, Apache Maven, MySQL

*Enterprise-level application that makes finding other gamers to play games with quick and easy.*

- Enhanced UI/UX by using Bootstrap to design a contemporary, user-friendly, and intuitive front-end to make site usability and navigation straightforward and concise
- Increased website and user security by incorporating route guards and input validations, hashing passwords with Bcrypt, and following secure coding practices to pass only the relevant information needed for a page to the respective JSPs
- Optimized website load speeds and performance by 25% through creating custom SQL queries that natively integrated with JPA Hibernate to auto-cleanse older data from the MySQL database

**DreamZZZ** | [GitHub Demo](#)

**Tech Stack:** MongoDB, Mongoose, Express.js, React.js, Node.js

*A two-in-one private dream journal and social media site to track and share your dreams.*

- Utilized JSON Web Tokens to provide strong and secure back-end login/reg authorization in order to augment site security
- Created single-page, non-reloading React components to provide a fluid UI/UX and improve site navigation speeds by 37%
- Implemented industry-standard RESTful APIs in the Express.js server to allow for easy code readability and updatability

## WORK HISTORY

**University of California, Davis**

Davis, CA | **2020-2022**

❖ **Vice President, Student Alumni Association** (Dec 2021 - June 2022)

- Designed and implemented a committee-style leadership board structure leading to a 50% increase in member involvement in leadership roles within SAA at UC Davis
- Mentored and managed student board members by advising how to effectively plan and execute engaging public events, which led to greater experiential learning of leadership and communication skills

❖ **Community (Resident) Advisor** (Mar 2020 - June 2022)

- Enhanced student experiences through planning and hosting over 100 engaging educational and social programs to create a safe space for residents to interact, foster healthy relationships, and build community
- Created and managed a Discord bot that enabled students, staff, and residents to communicate in a safe virtual environment

## ADDITIONAL TECHNICAL SKILLS

**Languages, Frameworks, and Libraries:** Swift, Django, R, Next.js, Tailwind CSS, C++, Matplotlib, TensorFlow, NumPy, Pandas

**Tools:** VS Code, Git, GitHub, Spring Tools Suite, ORMs, AWS-EC2, Postman, AJAX, SEO, XCode, RStudio, Advanced Excel/Sheets