# Ryan Flannery

San Francisco, CA | (442)-599-1276 | ryanvflannery@gmail.com | LinkedIn | Github

#### **EDUCATION**

## San Francisco State University

San Francisco, CA

Bachelor of Science in Computer Science, Minor in Computing Applications

May 2025

- GPA: 3.5, Dean's List
- Genentech Data Science and Machine Learning Certificate
- Undergraduate Coursework: Data Structures & Algorithms, Software Engineering, Operating Systems, Database Systems, Machine Learning for Data Science, Discrete Math, Object-Oriented Programming

# TECHNICAL SKILLS

Languages: TypeScript, Python, C#, SQL, HTML, Java, JavaScript, C++

Frameworks: React, Express, Node.js, Next.js, Spring, Kubernetes, GraphQL, REST API, Angular Developer Tools: Git, Docker, Azure, AWS, Postman, Linux, JUnit, Jenkins, PL/SQL, Agile, SDLC

#### EXPERIENCE

## Software Engineer Intern

Oct. 2023 – Dec. 2023

CodeDay

Remote

- Co-authored a merged pull request (#1095) in the Open Energy Dashboard, optimizing code for a platform with over 20,000 active users, contributing to more accurate data and system efficiency
- Implemented Metric and Unit Tests for readings retrieval API. Refactored kWh to MJ conversion logic, improving website data visualization, reducing API errors by 50%, and enhancing data accuracy by 20%
- Quickly adapted new technologies and workflows under the guidance of senior engineers, demonstrating a strong ability to learn and contribute effectively within a fast-paced team

## PROJECTS

**ZenZone** | TypeScript, React Native, Expo, Express, Node.js, MySQL

Feb. 2025 – Present

- Developed a cross-platform productivity app, enhancing user focus and increasing goal completion rates by 75% through a seamless UI and distraction-reducing features
- Reduced daily screen time by 1.5+ hours per user by integrating pomodoro-style timers, app-blocking, and personalized goal-setting to promote healthier digital habits
- Implemented real-time progress tracking with mobile screen time integration and a calendar, enabling users to set and monitor short- and long-term goals for improved focus and accountability

Joystick Journal | TypeScript, React, Express, Node.js, MySQL

Oct. 2024 – Jan. 2025

- Designed and implemented a relational SQL database with connected tables on AWS RDS, hosting it alongside a scalable backend on AWS EC2, delivering 20 RESTful API endpoints to drive application functionality
- Enhanced application by implementing Test-Driven Development with 50+ SuperTest cases and establishing a CI/CD pipeline for Vercel deployments, reducing bugs by 99% and accelerating deployment speed by 50%
- Led back-end development of user personalization features, improving security and user experience with AWS S3 integration for profile picture uploads, streamlined password updates, and credential management

### Jump Knight | C#, Unity

Aug. 2024 - Nov. 2024

- Engineered core game mechanics and UI for Jump Knight, a multi-level platformer, improving player interaction and game flow
- Refined input and collision systems to optimize control responsiveness and reduce latency, achieving a 97% bug-free gameplay experience across multiple playtests
- Designed and integrated custom sprites and animations to create a unique aesthetic, elevating the game environment's visual appeal

## Stroke Subtypes Machine Learning Model | Python, TensorFlow, NumPy

Mar. 2024 - May 2024

- Developed custom and utilized pretrained Convolutional Neural Network models (VGG16, ResNet50) to classify ischemic stroke images, increasing stroke subtype prediction accuracy
- Preprocessed over 395GB of pathology images using OpenCV for standardized model input, optimizing performance and accuracy
- Applied transfer learning techniques to improve stroke diagnostic predictions, increasing precision, recall, and F1 scores by 80%, significantly outperforming traditional classification methods.