

SAM ZAPPA

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EDUCATION

University of Washington (Seattle)

Sep 2022 - June 2026 (expected)

- BS of Computer Science from Paul G. Allen School of CS & Engineering (in progress)
- 3.99/4.0 GPA
- Relevant coursework: Data Structures & Parallelism, Intro to Algorithms, Intro to AI, Distributed Systems, Systems Programming, Software Design & Implementation, Software Engineering

Garfield High School

Sep 2018 - June 2022

- Class of 2022 Valedictorian
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PROJECTS

Lead Developer, *SwipeFight*

<https://github.com/aidenkatsura/SwipeFight>

- Lead full-stack development of SwipeFight, a cross-platform application that facilitates matchmaking between martial artists, as the central project of a quarter-long software engineering course
- Architected and developed scalable backend services using **Firestore** (NoSQL) and **Firebase Auth**, enabling user authentication, matchmaking logic, real-time chat, and leaderboard functionality
- Collaborated on frontend development of swipe interface, profile editor, and real-time chat system using **React Native**, Expo, and **TypeScript**, ensuring smooth user experience across iOS, Android, and web platforms
- Supported Continuous Integration (CI) pipelines with **GitHub Actions**, authored unit and integration tests with **Jest**, and maintained code quality through pull requests and code reviews

FlightApp

Intro to Data Management, University of Washington

- Developed model flight reservation app (in **Java**) utilizing **Azure SQL Database**
 - Designed relational database to track airline flights, customers, and reservations
 - Utilized relational database planning and modeling tools including entity relationship diagrams
 - Implemented database transactions, executing **SQL** queries via Java Database Connectivity API
 - Wrote custom test cases for application functions, including transactional tests simulating multiple clients interacting with the reservation system at once
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SKILLS

Languages: Java, Python, JavaScript, TypeScript, HTML, CSS, C, C++, SQL, Dart

Frameworks/Libraries: React, React Native, Expo, Node.js, Flutter, Jest, Mocha, D3.js

Tools & Platforms: Windows, Linux, Bash, Git, GitHub, GitLab, GitHub Actions, Firebase, IntelliJ IDEA, Visual Studio Code, Doxygen

Databases & Data Management: Firestore, Relational Databases, NoSQL, SQL Server, Azure SQL Database, SQLite

Concepts: Object-Oriented Programming, Distributed Systems, SDLC, Agile/Scrum, CI/CD, Data Visualization, Organization, Problem-solving, Communication