

Krish Adya

krishadya@gmail.com | +1 (408)-218-8554 | [LinkedIn](#) | [GitHub](#)

Education

San Francisco State University

BS in Computer Science (GPA: 3.8)

San Francisco, CA

- Coursework: Operating System Principles, Software Development, Introduction to Web Software Development, Analysis of Algorithms I, Programming Methodology, Probability and Statistics with Computing, Machine Structures, Discrete Math Structures, Data Structures, Software Engineering, Generative AI: Fundamentals and Applications, Numerical Analysis

Skills

Languages: Java, C++, C, Python, JavaScript, SQL

Software Engineering: Data Structures & Algorithms, Object-Oriented Programming (OOP), System Programming, Software Design, Multithreading, Memory Management, Debugging, Testing

Systems: Linux/Unix, Operating Systems, Process Management, Shell Scripting, Inter-Process Communication (IPC)

Web Development: HTML, CSS, JavaScript, REST APIs, Responsive Web Design

Tools: Git, GitHub, Linux, Unix, Visual Studio Code, IntelliJ IDEA, GCC, GDB

Concepts: Operating Systems, Process Management, Hash Tables, Linked Lists, Caching Systems, Version Control, Agile Development

Experience

Student Events & Technology Services – San Francisco State University

Aug 2025-Present

Audio-Visual Technician & Venue Manager

- Supported the deployment, configuration, and maintenance of audio, video, and networking systems across university events, ensuring reliable technical operations in high-availability environments.
- Diagnosed and resolved hardware, software, and connectivity issues under strict time constraints, minimizing service disruptions and maintaining operational continuity.
- Executed system validation, testing, and troubleshooting procedures prior to event deployment, proactively identifying and mitigating technical failures.
- Coordinated technical infrastructure across multiple event spaces simultaneously, managing competing priorities while maintaining service reliability.
- Collaborated with event coordinators, faculty, and technical teams to deliver seamless event experiences, strengthening cross-functional communication and incident-response skills.

San Francisco State University

Feb 2023-Nov 2023

Volunteer CS Tutor — CSC 210 & CSC 220

- Tutored 30+ students across two courses (Intro to Programming and Data Structures) in Java, OOP, linked lists, trees, recursion, sorting algorithms, and time complexity.
- Developed reusable debugging frameworks and practice problem sets adopted by instructors, improving average assignment pass rates by ~15%.
- Led one-on-one and group sessions applying systematic debugging methodology, increasing student confidence in identifying and resolving code defects.

Projects

RollIn - AI-Powered Classroom Attendance System

Python, Streamlit, OpenCV, DeepFace, SQLite

<https://github.com/krishadya/rollin-ai-attendance>

- Developed an AI-powered classroom attendance system that automated student check-ins using facial recognition, integrating DeepFace, OpenCV, and SQLite into an end-to-end application.
- Designed and implemented role-based access control (RBAC) for administrators and instructors, restricting course management, student enrollment, attendance records, and analytics based on user permissions.
- Engineered a modular backend architecture supporting course management, student enrollment, attendance history, analytics, CSV export, and PBKDF2-based password authentication through reusable components.
- Built a responsive multi-page Streamlit interface with automated face registration, real-time attendance tracking, and interactive dashboards for viewing and analyzing attendance data.

SFSU Marketplace

Full-stack marketplace with user auth, REST API, real-time messaging, and SQL data layer.

<https://github.com/krishadya/SFSU-Marketplace.git>

- Developed a full-stack marketplace platform enabling university students to create, browse, and manage product listings through a centralized web application.
- Implemented user authentication, listing management, and messaging functionality to support secure peer-to-peer transactions.
- Designed and integrated RESTful APIs and SQL-backed data models for account management, marketplace operations, and persistent data storage.
- Collaborated within a multi-developer Agile team using Git and GitHub to deliver production-ready features and iterative software improvements.

Copasite.in

Professional Web Development Platform

- Founded and launched Copasite, a freelance web development initiative providing custom website solutions for small businesses and organizations.
- Designed and developed responsive websites using HTML, CSS, and JavaScript with a focus on usability, performance, and mobile-first design.
- Implemented SEO best practices and Google Search Console indexing to improve search visibility and website discoverability.
- Managed client communication, requirements gathering, and project delivery throughout the website development lifecycle.

AI Dungeon Master

AI/LLM-powered RPG engine with custom state management and memory compression for coherent storytelling.

<https://github.com/krishadya/AI-Dungeon-Master.git>

- Built an AI-powered RPG engine using large language models, persistent state management, and memory summarization to maintain coherent multi-turn storytelling experiences.
- Engineered a structured validation layer that verified LLM-generated state changes, preventing invalid inventory, quest, health, and location updates.
- Implemented a session-based memory compression system that summarized previous interactions and preserved long-term narrative context across extended gameplay sessions.
- Developed a dual-mode architecture comparing a baseline free-form LLM against a structured state-managed system, improving consistency and reliability of generated adventures.

Custom Unix File System

Unix file system in C with persistent storage, inode-based directory management, and bitmap allocation.

<https://github.com/krishadya/FileSystem.git>

- Built a Unix-style file system supporting persistent storage, hierarchical directories, and custom file operations on a virtual disk volume.
- Implemented bitmap-based free-space allocation and block management to support efficient file creation, deletion, and storage reuse.
- Developed directory traversal, path resolution, and metadata management functionality to simulate real-world operating system file structures.