

Jonathan Chen

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ACADEMICS

M.S. Computer Science

San Jose State University, San Jose, CA

December 2025

B.S. Computer Science

San Francisco State University, San Francisco, CA

August 2023

SKILLS

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

Web Technologies: HTML, CSS, React.js, XML, XSLT

XR/VR Development: Meta Quest (Horizon OS), Unity (XR Toolkit), OpenXR, Oculus Integration SDK

Tools: Unity, Visual Studio, Visual Studio Code, Eclipse, Arduino, Oxygen XML, Terminal

Databases: MySQL, PostgreSQL, MongoDB, Cassandra, Neo4j, BaseX

EXPERIENCE

VR Developer | SJSURF, San Jose, CA

Present

- Develop a VR application to enhance the learning of Linear Algebra through visual and interactive experiences using Unity
- Implement core concepts such as vector manipulation, linear systems, and vector addition within a virtual environment
- Integrate multi-client architecture to facilitate communication and collaboration among users in the virtual space

Game Programmer | DustyIndustry Startup, San Francisco, CA

April 2024

- Collaborated with artists and audio engineers to develop a 2D turn-based desktop game using Unity
- Implemented A* pathfinding algorithm for enemy movements and attack patterns
- Advised strategic roadmaps to increase profitability through in-game purchases and micro-transactions

SCHOOL PROJECTS

Open World Game Project | SJSU

July 2025

- Utilized previous knowledge and skills to develop an open world game
- Incorporated unique features such as character switching, splash mechanics, and enemy AI with reinforcement learning
- Developed immersive gaming experience with advanced AI and unique gameplay experience

Course Selection Model Project for Database Course | SJSU

April 2024

- Developed a database system to organize students, instructors, and staff members into selected courses
- Applied data mining, distributed systems, and transaction processing concepts
- Integrated and optimized queries across relational, NoSQL, and XML databases

Pacman Project for Artificial Intelligence Course | SFSU

April 2023

- Implemented artificial intelligence-based search algorithms for Pacman game to find its food and avoid ghosts on its own
- Incorporated elements of reinforcement learning while utilizing heuristics and weights/biases
- Demonstrated proficiency in AI programming skills through successful implementation of maze navigation and ghost avoidance

Blob Detection Image Matching for Multimedia Systems Course | SFSU

Dec 2022

- Collaborated with another student to develop a blob matching program to detect zebrafishes from a sample video
- Performed detection search through applying Gaussian blur and identifying expected shapes of target objects
- Produced successful image processing program capable of accurately detecting zebrafishes in videos through object detection

Database Discord Bot for Introduction To Database Systems Course | SFSU

May 2022

- Assigned to develop a bot for student registration, enabling users to enroll, drop, and view courses
- Developed scheme with Remote SQL and program with Replit using Python for database management and user interaction
- Deployed a Discord bot that successfully streamlined student course registration processes

VOLUNTEER WORK

President | ACM SIGGRAPH Student Chapter at SJSU

July 2025

- Led club activities, including meetings, workshops, and collaborative projects
- Organized workshops on various computer graphics and visual effects topics to enhance members' skills and knowledge
- Facilitated large-scale graphics projects using Unity and Houdini, aligning with club goals

Engineer and Treasurer | ACM SIGGRAPH Student Chapter at SJSU

July 2024

- Orchestrated team efforts to develop large scale CG projects using Unity and Houdini
- Managed club's financial operations, budget planning, expense tracking, and fund allocation
- Fostered collaborative and positive learning environments within the club and ensuring prudent financial management

Editor and Alumni Club Advisor | Comics Art at SFSU

Dec 2023

- Edited and published ZINE magazines created by club members
- Coordinated events for student meetings and activities and advertised student artworks through ZINE magazines
- Facilitated the publication of creative works by club members and fostered supportive communities for aspiring artists