

Harvey Zhu

713-380-8227 | h639@cornell.edu | [linkedin.com/in/zhuharvey](https://www.linkedin.com/in/zhuharvey) | github.com/harveyzhu27 | harvey-zhu.vercel.app

EDUCATION

Cornell University

Ithaca, NY

Bachelor of Arts in Computer Science

Aug. 2023 – May 2026

- **Relevant Coursework:** Machine Learning, Data Structures and Functional Programming, Object-Oriented Programming, Computer Systems, Game Design, Android Development, Backend Development

TECHNICAL SKILLS

Languages: Java, JavaScript, TypeScript, CSS, HTML, Python, SQL, OCaml

Frameworks/Tools: React, Flask, Firebase, LibGDX, Box2D, Docker, Supabase, PostgreSQL

Developer Tools: Git, VS Code, IntelliJ, Eclipse, Postman, Node.js, Figma, Ubuntu

Libraries: TensorFlow.js, NumPy, Pandas

LEADERSHIP

Gilded Flame (Project Lead, Lead Coder, Designer)

Java, LibGDX, Box2D

Jan 2025 – May 2025

- **Led a 9-person team** through weekly stand-ups and sprint planning; organized play-testing sessions, compiled bug reports, and ensured shippable milestones and clear deliverables for Cornell's GDIAC Showcase
- **Facilitated collaboration** between technical and creative teams by translating complex code concepts into clear terms for artists and converting design ideas into actionable engineering tasks.
- Architected **core gameplay systems:** dynamic light/shadow mechanics for puzzle interactions, torch throwing and physics-based projectiles, state machines, enemy AI with path-finding and light-reactive behaviors, collision handling, lead level designer and overall platforming logic using **Tiled, Java, LibGDX, and Box2D**.
- **Oversaw marketing:** produced game trailer, managed booth setup, and led live demos for over 150 attendees

EXPERIENCE

Teidore | Full Stack Software Engineer Intern

Jun 2025 – Present

- Develop **AI/ML product tagging and compatibility classification** using **OpenAI APIs, Ollama, and BERT** to replace manual workflows, improving categorization accuracy and query speed
- Prototype and manage **AWS migration** workflows: build a scrape → upload → S3/RDS ingestion pipeline for retailer product data, design reusable schemas, and generate cost-aware deployment recommendations
- Design and implement **ETL pipelines** to transform and normalize large-scale e-commerce product data into clean, database-ready formats with robust error handling
- Refactor and index **Supabase SQL** queries to streamline advanced search functionality to improve result relevance
- Lead UX and performance improvements on aerospace pages through dynamic rendering and UI modularization

PROJECTS

TAKO | JavaScript, TypeScript, React, Firebase, OpenAI

[GitHub](#)

- Develop an **AI-powered productivity engine** using **OpenAI APIs** and **NLP** to analyze task completion patterns, weekly/monthly analytics and recommend optimized schedules and personalized goals.
- Migrate the codebase to **TypeScript** and implement reusable React hooks and components, improving maintainability and reducing potential runtime errors
- Integrate **Firebase Authentication and Firestore** for secure, real-time data syncing across projects, and deploy a mobile-first **production build** to Firebase Hosting

Database Agent | TypeScript, Next.js, Drizzle ORM, OpenAI API, PostgreSQL

[GitHub](#)

- Built a **CLI database agent** that automatically implements database features in a Next.js project, including **schema creation, migrations, API routes, and frontend integration**
- Utilized **Drizzle ORM + PostgreSQL** for db management, table and data population, and route generation
- Demonstrated **full-stack automation:** CLI tool parses language queries, modifies project files, updates backend, and integrates results into the Spotify-clone frontend with live fetching
- Leveraged **modern frontend stack** including **React 19, Tailwind, shadcn/ui, Framer Motion**, and icon libraries to create responsive, maintainable UIs for generated components