

# Ankur Desai

(248) · 657 · 3805   ◇   [ardusa05@gmail.com](mailto:ardusa05@gmail.com)   ◇   <https://ardusa.github.io>

## EDUCATION

### Michigan State University

*B.S. in Computer Science & Engineering*

Expected, May 2028

*East Lansing, MI*

- GPA: 3.74
- Relevant Coursework: Linear Algebra, Discrete Mathematics, Computer Organization & Architecture (Spring 2026), Object-Oriented Software Design (Spring 2026)

## EXPERIENCE

### Drone Systems Research

*Exedy Drones*

September 2025 - Present

*East Lansing, MI*

- Researching flight path simulations and path making algorithms for autonomous agricultural drones using Python
- Building object detection models using TensorFlow and OpenCV for drone navigation and obstacle avoidance

### Web Development Intern

*WFS Consulting Group*

May 2025 - August 2025

*Plymouth, MI*

- Crafted a Figma design and implemented responsive and dynamic elements using CSS media queries and JavaScript
- Deployed the website via GoDaddy Linux hosting servers, ensuring live client access and functionality worldwide
- Drove customer engagement by 200% through integrating contact forms, social media links, and interactive elements

## PROJECTS

### WizViz (SpartaHack X)

*Hackathon Project | Python, OpenCV, MediaPipe, PyGame*

February 2025

*Devpost Link*

- Developed an augmented reality game using Computer Vision and PyGame where two players can duel as wizards, casting spells, dodging attacks, and using healing potions, all in real-time via hand gestures and body movements
- Awarded Best Game in Interactive Media track, among 100+ projects and 350+ participants at SpartaHack X
- Applied OpenCV and MediaPipe Pose model to track multiple player movements, enabling gesture recognition

### Project Team Lead

*ThinkStack*

September 2025 - Present

*East Lansing, MI*

- Orchestrated a cross-functional team of 4 software engineers and 2 designers to architect, launch, and iterate upon a Next.js webapp and an Electron desktop application for note-taking, concept visualization, and creative exploration
- Led SCRUM meetings, built CI/CD pipelines, and drove collaboration between frontend, backend, and UI/UX teams
- Developed a REST API using FastAPI, SQLAlchemy, MongoDB, and Neo4j to handle authentication, manage user data, efficiently store and query notes, and visualize relationships between concepts and notes
- Used requirements engineering to gather client feedback, define project scope, and plan features for development

### Mira - AI Personal Assistant

*Full-Stack Development | Python, FastAPI, SQL, Electron, Node.js*

May 2025 - September 2025

*GitHub Link*

- Developed a REST API using FastAPI, Whisper, noisereduce, DBScan, and Gemini to transcribe audio, assign speaker IDs, extract actionable tasks, and enable conversational interactions and voice commands with Mira
- Designed an Electron desktop client that listens passively for voice commands and maintains interaction history
- Implemented a client-selection algorithm with Voice Activity Detection (VAD) to support multiple devices on each Mira Network, and intelligently switching between connected clients based on proximity, uptime, and noise level
- Deployed the API on AWS Lambda, and utilized Amazon RDS and SQLAlchemy to store user data and interactions

## TECHNICAL SKILLS

**Languages** ..... Java, Python, JavaScript, SQL, Bash  
**Frameworks & Libraries** ..... React, Node.js, Electron, FastAPI, SQLAlchemy, MediaPipe, OpenCV, Gemini API  
**Databases** ..... MongoDB, Neo4j, PostgreSQL, Amazon RDS  
**Tools & Platforms** ..... Docker, Git, GitHub Actions, Cursor IDE, Figma, AWS Lambda, GoDaddy Hosting