

# Siya Choudhary

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## EDUCATION

### University of Illinois Urbana-Champaign

Graduation: 05/27

*Bachelors of Science, Computer Science* | GPA: 3.95 | Dean's List.

*Urbana, IL*

**Related coursework:** Mobile App Development, Data Structures, Computer Architecture, Game Development, Discrete Math

**Extracurriculars:** Disruption Lab - Executive Engineering Manager | Women in CS - Corporate | SWE | C++ Course Assistant

## TECHNICAL SKILLS

- **Languages & frameworks:** JavaScript (React, Node.js), TypeScript, Python (NumPy, Pandas, TensorFlow), C++, Java (Spring Boot, JavaFX), Kotlin, Swift, MATLAB, HTML/CSS
- **Databases:** MongoDB, MySQL, SQLite, Postgres, Firebase
- **Tools:** AWS, Docker, GitHub, ServiceNow, Xcode, Android Studio, Figma, CI/CD, Agile, Unity, Unreal Engine

## WORK EXPERIENCE

### Air Products

May - Aug 2025

#### Software Development & Automation Intern

Allentown, PA

- Architected and deployed **14 B2B SaaS solutions** for enterprise-scale workflow automation, improving ITSM efficiency.
- Refactored licensing processes & scripted cost optimizations, projecting **\$500K+ annual savings**.
- Supported departmental transformation by integrating **ServiceNow Agentic AI solutions** into workflows.

### SafeBeat RX

June - Aug 2024

#### AI/ML Intern

- Processed & labeled **10K+ ECG data points** to train ML models detecting abnormal heart patterns.
- Collaborated with external medical partners to expand remote patient monitoring using **AI-driven therapeutics**.

### Cisco

June - July 2023

#### Software Development Extern

New York, NY

- Led a cross-functional team to build **EcoVenture**, a sustainable investment platform with API integrations.
- Earned **Top Extern & Most Valuable Team Member** awards for technical innovation & leadership.

### Game2learn Lab, North Carolina State University

June - Aug 2023

#### STEM Education Research Intern

Raleigh, NC

- Developed **6 interactive educational games** in Java & Python, integrating global pedagogical research.
- Awarded **Top Technical & Creative Intern** for innovative design & problem-solving.

## RESEARCH

### Interactive Display Lab, University of Illinois Urbana-Champaign

Aug 2024 - Present

#### Researcher

Urbana, IL

- Developed a **virtual interface to control synthetic jet arrays**, enabling no-touch real-time haptic feedback.
- Implemented algorithms to modulate airflow patterns and enhance **tactile feedback precision**.
- Integrated **embedded hardware with software** using serial communication protocols for seamless, low-latency control.

### Human-Computer Integration Lab, University of Chicago

Aug 2023 - May 2025

#### Researcher & Author - [Adaptive Electrical Muscle Stimulation Improves Muscle Memory](#)

Chicago, IL

- Built **experimental Python frameworks** to automate electrical muscle stimulation (EMS) for effecting learning strategies.
- Developed an intuitive framework enabling conduction of study at global scale in the US, Canada, France, Japan, and more.
- **Published presenter and youngest first author** at Conference on Human Factors in Computing Systems 25, Japan.

## SELECT PROJECTS

### [Flux](#) - Team execution web app

- Designed and developed a team-execution app with **role-based access control, task workflows, and status tracking**.
- Owned end-to-end delivery: built the **full-stack React app** and deployed to production on **AWS Lightsail and Cloudfront**.

### [Jinship](#) - University resource tool (Chrome extension + LLM)

- Led development of **LLM-powered** university resource tool, integrating **OpenAI and Perplexity APIs** for support.
- Modeled **prompt design and retrieval logic**, improving result relevance for both a web app and Chrome extension.

### [StudyHive](#) - Collaborative study iOS mobile app

- Built **real-time video + chat rooms** (WebRTC peer connections and Video SDK) for remote group sessions.
- Implemented calendar-backed task planner with recurring events and Pomodoro study sessions using background timers.
- **1st place 2023 Congressional App Challenge** for the 8th IL District at the #HouseofCode event at Capitol Hill.

### [OmniFit](#) - Workout planner Android mobile app

- Developed a mobile app in **Java and MySQL** for AI constructed workout plans aimed at reducing sports injuries in athletes.
- Implemented weekly plan generation (considering user preferences, equipment, time, budget) and **adherence analytics**.
- Recognized as a **top 1% finalist in the Rise for the World global challenge** for innovation in fitness and injury prevention.