# Dhyey Patel

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## EDUCATION

**Eastern Michigan University** — ***Ypsilanti, MI***
Master of Science, Computer Science – **GPA: 4.0/4.0** — *August 2025 - December 2026*
**University of Cincinnati** — ***Cincinnati, OH***
Bachelor of Science, Computer Science with Math Minor – **GPA: 3.744/4.0** — *August 2020 - May 2025*

## SKILLS

**Languages:** Python, TypeScript/JavaScript, Java, C++, SQL
**Frameworks:** React, Next.js, Node.js, Express, Flask/Django, REST APIs
**Databases:** PostgreSQL, MongoDB, Prisma ORM, SQL schema design
**Tools:** Git, Docker, Linux, AWS (EC2, S3), CI basics (Git workflows), D3.js
**CMS:** Modern Campus (Omni CMS), PCF/XSLT templating, accessible UI patterns
**Certifications:** IBM Data Science Practitioner; IBM Design Thinking Practitioner; Cybersecurity Virtual Apprenticeship (iQ4)

## EXPERIENCE

**Eastern Michigan University** — ***Ypsilanti, MI***
***Web Developer Graduate Assistant*** — *Sep 2025 - Present*

- Built **3 transfer-planner tools** (HFC/Schoolcraft/WCC to EMU) by converting articulation guides mappings into a **structured JSON dataset** and implementing an **accessible search + results UI** in Omni CMS, replacing static link directories with interactive program lookup.
- Implemented **accessibility-first UI behavior** (keyboard navigation, focus management, screen-reader-friendly markup) and **shareable results** via URL parameters to improve usability for transfer applicants.
- Refactored list-heavy pages into **data-driven components** using JavaScript + CMS templating to improve consistency and reduce maintenance effort for non-technical editors.
- Standardized **RMI inquiry forms and tracking workflows** across program pages, increasing inquiries by ~2x.
- Updated and validated **catalog links across ~400 program pages** for the new academic year, reducing broken URLs and keeping program pages aligned with current catalog information. Owned tickets end-to-end.

**Givaudan** — ***Cincinnati, OH***
***Front End Developer Intern*** — *April 2023 - August 2023*

- Migrated an AI-integrated desktop app ("ATOM") into a **React** web application to enable cloud delivery and faster feature iteration across stakeholders.
- Built dynamic UI features for "Insight", including a custom video player and interactive views to improve user experience.
- Ported R and MATLAB algorithms to JavaScript to run in the web stack while preserving output parity for scientific workflows.

***Web Developer Intern*** — *August 2022 - December 2022*

- Optimized an R-based analytics workflow using caching and lighter libraries, cutting data load time by 80% and response time by 30%.
- Built **3 D3.js visualizations** to explore large datasets, reducing analysis time by 40% for end users.
- Worked in Agile standups and **Git-based workflows**; contributed features through review and iteration.

## PROJECTS

**Job Fair Match -** *https://github.com/Dhyey-Patel28/job-matching-platform* | *https://job-fair-match.vercel.app/* — *September 2024 - December 2025*

- Built a **swipe-based job matching web** app using Next.js + TypeScript + Prisma + PostgreSQL (Neon); deployed on Vercel with production-ready routing and UI state.
- Designed relational schema and implemented API endpoints for profiles, swipes, and matches, enforced data integrity and fast lookups.
- Implemented authentication/authorization for user sessions and protected actions (logins, swipes, match retrieval).

**Automata Workbench -** *https://github.com/Dhyey-Patel28/automata-workbench* — *October 2024 - November 2025*

- Implemented core automata algorithms (NFA to DFA conversion, DFA minimization) and validated correctness with test cases.
- Built an interactive UI to input automata and visualize states/transitions to support debugging and learning.

**Drone Flight Data Analytics -** *Private repo (architecture + demo available on request)* — *October 2024 - November 2025*

- Built a reproducible data pipeline for drone telemetry using Kafka + Spark on AWS (EC2/S3), generated analysis and visualizations for flight data.

**Senior Design Project: SegLungAI -** *https://github.com/Dhyey-Patel28/SegLungAI* — *August 2024 - April 2025*

- Built a U-Net/ResNet-based segmentation pipeline, achieving about **0.9 as IoU score** in lung segmentation for neonatal chest scans.

## AWARDS

**Graduate Assistantship (Full Tuition Waiver)** — *September 2025*
**UC Global Scholarship, International Outreach Scholarship, Bearcats Everywhere Scholarship** — *November 2020*
**Dean's List, Fall 2020 - Spring 2025** — *February 2021*