Darsh Patel

Baltimore, MD | dpatel37@umbc.edu |Personal Site |LinkedIn| Github

EDUCATION

B.S in Computer Science Expected: May 2026

University of Maryland - Baltimore County

Related Coursework:

Object Oriented Programming, Data Structures, Artificial Intelligence, Computer Organization, Principles of Programming, Statistics

Extracurriculars/Honors:

-Appointed as incoming GDG Lead for Fall 2025 and Spring 2026, fostering collaboration among over 100+ members to promote skill development and knowledge sharing within UMBC's tech community

-Attained Dean's List distinction for the Spring 2024 semester, demonstrating academic dedication in achieving a gpa above 3.5

SKILLS

Languages: Python, C, Java, C++, SQL, JavaScript, TypeScript, HTML, CSS

Frameworks/Libraries: React, Next.js, Node.js, Tailwind, Firebase, NumPy, OpenCV, TensorFlow, Plotly, Flask, React-Native

Tools: mySQL, MongoDB, Microsoft SQL Server, AWS, Git

Certifications: AWS Certified Cloud Practitioner, Cisco Cybersecurity Essentials

EXPERIENCE

Lead Software Engineer – *hackUMBC* March 2024 - Present

- Aided fellow organizers in hosting a 24-hour collegiate hackathon with over 440 participants by managing technical team to develop and update hackathon website and app, used by both participants and organizers
- Spearheaded a technical team of 6 to migrate hackUMBC.tech to Next.js, reworking the front-end with React, JavaScript, and Tailwind while configuring an AWS backend to improve data management and support secure, scalable operations
- Streamlined participant data collection by integrating a registration form using AWS tools, ensuring scalable, reliable service for 440+ contestants

React • Next.js • Python • JavaScript • Tailwind • AWS • Lambda • DynamoDB • S3 • GitHub • Google Apps Scripts • Project Management

Undergraduate Researcher – *UMBC DAMS Research Group* September 2024 - Present

- Developing Python scripts for advanced prompt engineering across multiple large language models (LLMs) to process, analyze, and generate precise summaries of thousands of privacy policies, effectively assessing LLMs' processing capabilities in the GenAIPABench project
- Designing and deploying a React-based website with a Firebase backend to store, categorize, and enable efficient search functionality for over 1000+ privacy policies, creating an interactive platform for presenting project findings

React • Next.js • JavaScript • Python • Firebase

Web Development Intern – *CHOYCES LLC* September 2024 - Present

- Overseeing and optimizing the CHOYCES website using WordPress, JavaScript, and HTML/CSS to boost user engagement, with a target of increasing retention rates by 50%.
- Building an educational app with TypeScript, React Native, and Python that promotes a 35% improvement in learning retention through engaging, interactive features and a user-centric interface

React • Node.js • Python • JavaScript • WordPress

PROJECTS

hackUMBC Website August 2024 - September 2024

- Engineered a responsive front-end for hackUMBC.tech using React, Next.js, CSS, and Tailwind, to ensure a seamless experience across devices, receiving positive feedback from 90% of users for its intuitive design and smooth transitions
- Built a robust AWS backend for participant registration using DynamoDB and S3, securely storing user information and providing reliable access to resumes and registration details from over 440 participants

Full-Stack Note Taking Tool August 2024 - September 2024

- Developed a full-stack note-taking tool leveraging TypeScript and Next.js, optimizing data retrieval speeds by 40% through efficient database queries
- Configured server-side authentication via Clerk and Convex with GitHub integration, allowing seamless login for 200+ users, elevating user experience and security across platforms

American Sign Language Image Recognition Program July 2023 - August 2023

- Engineered an AI-powered American Sign Language (ASL) recognition system, enhancing accuracy by 90% and cutting interpretation time by 50%. The model was trained using Python, leveraging machine learning algorithms and key libraries, including OpenCV and TensorFlow, to optimize image processing and hand signal detection
- Developed an HTML/CSS landing page to create a user-friendly interface, boosting user retention and engagement by 20%