Darsh Patel

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EDUCATION

B.S in Computer Science

University of Maryland - Baltimore County

Related Coursework:

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

Extracurriculars/Honors:

- -Active Member of Google Developers Group, and incoming GDG Lead for Fall & Spring 2025.
- -Active Tech Team Lead for hackUMBC, UMBC's only hackathon.
- -Member of UMBC CyberDawgs Club, SAD Club, and Game Dev Club.
- -Dean's List during the Spring 2024 semester at UMBC.

SKILLS

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

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

Tools: mySQL, MongoDB, AWS, Git

Certifications: AWS Certified Cloud Practitioner, Cisco Cybersecurity Essentials

WORK EXPERIENCE

Web Development Intern - CHOYCES LLC

September 2024 - Present

Expected: May 2026

- Designing and managing CHOYCES website with WordPress, JavaScript, and HTML/CSS, and integrating payment systems like PayPal/Square with Python, aiming to improve transactional efficiency by 30%
- > Developing a learning app using TypeScript, React Native, and Python, aiming to enhance learning retention by 35% through interactive and user-friendly design features

React • Node.js • Python • JavaScript • WordPress

Undergraduate Researcher – UMBC DAMS Research Group

September 2024 - Present

- > Undergraduate Researcher in Professor Roberto Yus' Lab at the UMBC DAMS Research Group
- > Implementing website in React, with a Firebase backend for Privacy Policy storage, and writing scripts in Python, in order to perform prompt engineering on multiple LLM's for the GenAIPABench project, for parsing of thousands of Privacy Policies', and generating the most accurate summaries, in order to test LLM processing capabilities

React • Next.js • JavaScript • Python • Firebase

Technical Team Lead – hackUMBC

March 2024 - Present

- > Helped organizers host a 24-hour collegiate hackathon competition with over 440 participants by managing technical team to develop and update hackathon website and app, used by both participants and organizers
- > Improved user retention by 50% by migrating hackUMBC.tech to Next.js and reworking front-end design using React, JavaScript, and Tailwind
- > Streamlined user data collection by integrating a registration form with AWS DynamoDB, and S3, ensuring scalable and reliable service for over 400+ contestants

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

PROJECTS

Note Taking Web Application

August 2024 - September 2024

- > Developed a Notion-like 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

Personal Portfolio Website

July 2024

- > Created a visually appealing and fully responsive <u>Personal Portfolio Website</u> utilizing HTML, CSS, and JavaScript, which enhanced online presence and received positive feedback from 90% of users surveyed for usability and design
- > Optimized viewports for both mobile and desktop devices, resulting in a seamless browsing experience; 20+ users commended the mobile layout and intuitive hamburger menu.

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%