Shiv Patel

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Education

McMaster University Hamilton, Ontario

Bachelor of Engineering (B.Eng), Computer Engineering Co-Op

Sept. 2023 - Apr. 2028 (Expected)

- <u>Relevant Courses</u>: Data Structures & Algorithms, Principles of Programming, Logic Design, Electronic Circuits & Design, Probability & Statistics for Engineering, Artificial Intelligence Innovative Technologies
- <u>Clubs & Teams</u>: MacEng Ambassador & Tour Guide, DeltaHacks X (**Hackathon Participant**), McMaster Gujarati Students Association (**VP Finance**), McMaster Intramural League (**Game Day Official**)
- Awards: Engineering Dean of Excellence Award (\$7500), McMaster University Award of Excellence (\$3000)

Technical Skills

Programming Languages: Python, C*, C++*, Java*, HTML/CSS, JavaScript, TypeScript*, R*, MATLAB, LaTeX, Verilog* Software: Next.js, React.js, Three.js*

Hardware: Arduino, PIC Microcontroller, AD3, Quanser Technologies

Tools: Figma, GitHub, VS Code, Jupyter, Microsoft Office (Excel, Teams, Outlook, Word, PowerPoint), AnsysGranta, AutoCAD, Aceternity UI, Framer

Certifications/Training: WHMIS Trained, First Aid & CPR/AED (Level C)

Projects

Personal Website/Portfolio [IN PROGRESS]

September 2024

 $HTML/CSS/JavaScript,\ TypeScript,\ TailWindCSS,\ Next.js,\ React.js,\ Figma$

Personal Project

- Developed using Next.js with TypeScript, incorporating server-side rendering for improved performance and SEO, alongside Framer Motion for sleek animations.
- $\bullet \ \ \text{Integrated } \textbf{React hooks} \ \text{for efficient state management, and dynamic routing to showcase projects with seamless navigation.}$
- Designed with Tailwind CSS for a modern, responsive UI/UX, ensuring mobile-first optimization across all devices.

Power in Community - The Porta-basket

Mar. 2024 – Apr. 2024

Academic Project

AutoCAD, AnsysGranta, PrusaSlicer, Microsoft Applications

- Collaborated on the **IMPACT Initiative** to **design a collapsible basket prototype for wheelchair attachment**, addressing mobility and accessibility challenges **for a client with spina bifida**, enhancing their independence.
- Used AutoCAD for 3D modeling and laser cutting for precise fabrication, ensuring the prototype's functionality and ease of use.
- Applied PrusaSlicer for 3D printing components, and employed an iterative design process to refine the product, improving upon traditional wheelchair storage solutions.
- Led the **project management** efforts, coordinating an interdisciplinary team to develop a user-friendly, accessible solution, with plans to improve collapsibility, waterproofing, and item containment.

Lurnius Jan. 2024

Python, React, SQL, TypeScript, Next.js, Node.js, Express.js, Figma

Hackathon Project

- Collaborated with Yax Patel, Peter Yang, and Sharvin Soosaipillai
- Designed a responsive frontend using Next.js, React, and TypeScript, optimized through Figma prototypes, to facilitate community engagement with an intuitive interface for voting and commenting on resources.
- Leveraged Cohere's large language models (LLMs) to automate the curation and classification of educational resources, enhancing personalized content delivery on a web-based interface.
- Developed a scalable backend with Node.js, Express, and TypeScript, integrating PlanetScale's MySQL-compatible database for efficient data management and user interaction.
- Integrated Google YouTube and Books APIs along with the Open Educational Resources (OER) API to dynamically source a diverse range of learning materials, maintaining content relevance and freshness.

Work Experience

McMaster University Housing & Conference Services

April 2024 - Present

 $Residence\ Life\ Staff\ -\ Living\ Learning\ Community\ (LLC)\ Community\ Advisor$

Hybrid

- Develop interactive activities to promote personal dignity and mutual respect within the assigned community area.
- Ensure the physical, mental, and social safety of all participants, promptly reporting any issues to supervisors.
- Maintain confidentiality while liaising with internal stakeholders on student services matters.
- Conduct regular rounds of residence buildings, promoting staff engagement and community standards through the coordination of initiatives and events.

Jays Care Foundation

Jun. 2024 - Aug. 2024

 $On ext{-}Site$

RBI SE: Coach

- Lead and support a group within a large camp setting of up to 200 youth, ensuring a safe, inclusive, and welcoming environment.
- Collaborate with an Inclusion team and program directors to develop, implement, and adapt camp programs to meet diverse needs, conducting assessments and creating appropriate accommodations.
- Serve as a role model and advocate for campers, fostering a culture of respect, empathy, and understanding, while coordinating with families, staff, and external support services.
- Regularly evaluate and adjust inclusion initiatives based on feedback, ensuring continuous improvement in the camp's
 inclusivity efforts.