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>: Design & Projects in Engineering, Principles of Programming, Logic Design, Circuit Analysis, Artificial Intelligence Innovative Technologies
- <u>Clubs & Teams</u>: McMaster Microbuild Engineering Society (**Software Development Officer**), MacEng Ambassador & Tour Guide, DeltaHacks X (**Hackathon Participant**), McMaster Gujarati Students Association (**VP Finance**), McMaster Intramural League (**Game Day Official**)
- Awards: McMaster Engineering Dean of Excellence Award (\$7500), McMaster University Award of Excellence (\$3000)

Projects

Personal Website/Portfolio — 🗘 🏶

December 2024

 $TypeScript,\ Next. js,\ React. js,\ TailwindCSS,\ JavaScript,\ Git$

Personal Project

- Designed and developed a fully responsive personal portfolio website using **Next.js**, **React.js**, **and TailwindCSS**, optimizing for both desktop and mobile experiences.
- Implemented dynamic routing and efficient state management to showcase projects, skills, and professional achievements seamlessly.
- Leveraged **TypeScript and Git** for robust code structure and version control, ensuring maintainability and scalability of the project.
- Integrated SEO best practices and web performance optimization techniques, achieving improved search engine visibility and faster load times.

Snake Game — November-December 2024

C/C++, Git

Academic Project

- Developed a classic **Snake Game** using **C/C++**, utilizing **VSCode** to design an interactive, live-updating UI that dynamically responds to user input and game events.
- Implemented core game mechanics such as **real-time collision detection** and adaptive gameplay logic, ensuring smooth performance and an engaging user experience.
- Leveraged **object-oriented programming (OOP)** to modularize game components, improving code readability and enabling seamless feature expansion.

Lurnius — 🗘 0 U Jan. 2024

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

Hackathon Project

- 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

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

Hybrid

- Used Teams, Outlook, and Excel for scheduling, reporting, and tracking key performance metrics.
- Ensure all participants' physical, mental, and social safety, promptly reporting any issues to supervisors.
- Maintain confidentiality while liaising with internal stakeholders on student services matters.
- Organized 6+ community events each semester, using Excel and Microsoft Project for budget and task management.
- Created event flyers and digital content using Canva, increasing engagement by 25%.

Skills

Languages: Python, C/C++, HTML/CSS, JavaScript, TypeScript, MATLAB, LaTeX, R

Software: Next, React, TailwindCSS

Hardware: Verilog (HDL), Arduino, Analog Discovery 2/3, Quanser Technologies

Tools: Figma, GitHub, Git, Quartus, PSpice, VS Code, Jupyter Notebook, Microsoft Office (Excel, Teams, Outlook, Word,

PowerPoint), AnsysGranta, AutoCAD, PrusaSlicer, Aceternity UI, Framer

Certifications/Training: WHMIS 2015, First Aid & CPR/AED (Level C), safeTALK, AODA, Ontario G-Class License