

Yax Patel

[Email](#) | [LinkedIn](#) | [GitHub](#)

EDUCATION

McMaster University

Bachelor of Engineering - Computer Engineering

Hamilton, ON

September 2022 – April 2026

TECHNICAL SKILLS

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

Frameworks: React, Node.js, Express.js, RESTful APIs, SFML, Unity

Developer Tools: Git, npm, Google Cloud Platform, Firebase, MongoDB, JSON, VS Code, Visual Studio

EXPERIENCE

Code Sensei

July 2021 - June 2022

Code Ninjas

Vaughan, ON

- Guided children aged 7-14 in programming through building games in a virtual 1-on-1 setting, focusing on modular programming.
- Educated students on programming fundamentals in JavaScript and Python.
- Informed parents weekly on student projects, progress and skills, resulting in positive feedback and increased student engagement.
- Achieved 100% customer satisfaction rating from parents for consistently delivering high-quality instruction.

Creator and Developer

November 2020 - July 2022

Mash Backslash Studios

Hamilton, ON

- Developed multiple video games using C# in the Unity game engine in a group of two high school students.
- Expanded games by adding new features and optimizations, resulting in improved game performance and user experience.
- Placed first at the Westmount Coding Club Game Jam and second at the 48 + 8 Jam 2021.
- Organized the KeysToTheJam 2021 game jam, which attracted 25+ participants and generated positive feedback from attendees.

PROJECTS

Fluid Simulation | C++, SFML, Git

February 2023

- Created an accurate and precise fluid simulation based on a research paper on fluid dynamics.
- Employed numerous optimization techniques to improve the performance of the simulator.
- Continuously tested and debugged the project to ensure smooth and efficient functioning.
- Resolved optimization and performance challenges by using strong problem-solving skills.

mflix | React, MongoDB, HTML/CSS/JavaScript, Git

January 2022

- A movie information browsing web app that uses a MongoDB database to display descriptions, ratings and more.
- Implemented efficient search functionality by indexing and querying MongoDB database using serverless functions.
- Optimized performance with client-side caching and server-side rendering
- Demonstrated proficiency in creating full-stack web apps using various front-end and back-end technologies.

Verifme | Node.js, Express.js, HTML/CSS/JavaScript, MongoDB, Heroku, Git

February 2021

- A platform that connects high school students and helps to break isolation barriers.
- Developed a 1st place-winning web app in 48 hours with a group at the PTC CodeAgainstCovid Hackathon.
- Designed and planned out a comprehensive prototype in Figma to help guide development.
- Constructed MongoDB database schemas for user posts.
- Collaborated in a fast-paced environment to deliver a high-quality product within the time constraint.

Backend Bruno | C#, Unity, PlasticSCM

November 2020 - August 2021

- A zombie-survival/shooter game with an emphasis on verticality.
- Collaborated in a group of two high school students over the span of 10 months to develop in Unity with C#.
- Optimized game by analyzing Unity's profiler to identify areas of improvement in the game's code.
- Accumulated 17,000 impressions within the first 7 days of release.
- Implemented new game mechanics and features, resulting in positive feedback from players and increased engagement.