

Rajat Patwari

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in patwarir

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SKILLS

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

Tools: ASP.NET Core, Node.js, Express.js, Git, Bootstrap, SQLite, Visual Studio, AWS

Certifications: MTA: Software Development, MTA: Database Administration, RECF Robotics, MOS 2013

EXPERIENCE

Student Software Developer

Aug 2017 – Mar 2019

Lakewood High School | St. Petersburg, FL, USA

- Created an internal school web app to schedule meetings between parents and front administration members. Met with the administration team to obtain requirements and mold them into a functioning website using **HTML**, **SCSS**, **TypeScript** and **Bootstrap** for the frontend. Used **ASP.NET Core MVC (C#, Razor)** and **SQLite** on the backend to provide extensibility.
- Implemented a **REST ASP.NET Core Web API (C#)** to manage the school's technology resources.
- Managed accounts on **Active Directory** to help students recover user credentials.

Programming Club Executive

Oct 2019 – Jun 2020

West Humber Collegiate Institute | Toronto, ON, Canada

- Advertised and increased club membership by **5** members or **17%**.
- Taught peers and younger students how to code using **Python**, **Java** and **Rust**.

PROJECTS

Vertex <https://gitlab.com/patwarir/vertex>

May 2019 – Aug 2020

- Built a new stack-based high level assembly language from scratch in **.NET Core (C#)**.
- Improved the user experience by achieving a **10%** performance uplift via a **47%** opcode reduction between versions 1.0 and 2.0. Provided users with more options through increasing the size of the standard library from **8** functions to **54** functions, and **104** functions planned for version 2.5.

Candy Launcher 3000

Sep 2020 – Dec 2020

- Developed the web component for an automated candy launching mechanism that helps maintain social distancing during Halloween. Independently built the backend using **Node.js/Express.js** in **TypeScript** and a static frontend using **Bootstrap** and **Axios**.
- Collaborated with **4** others using **Git** for version control.

Personal Website <https://rajatpatwari.com>

Feb 2020 – Jan 2021

- Constructed and deployed a personal website hosted on an **AWS Lightsail** cloud instance using **Node.js/Express.js** and a **NGINX** reverse proxy.

EDUCATION

University of Waterloo

Sep 2020 – Mar 2025

Candidate for Bachelor of Software Engineering (B.S.E.), GPA **91.27%**