## Varun Pathak

+1 (289) 981 - 2868 • pathav4@mcmaster.ca • linkedin.com/in/v5run • github.com/v5run

#### **Education**

McMaster University

Expected Graduation: May 2027

#### Software Engineering and Management Co-op (B.Eng.Mgt.)

Relevant Course Work:

Object Oriented Programming (Java), Data Structures & Algorithms (Java, C++), Software development (C, Bash/Unix),
Digital Systems, Interfacing, & Computer Architecture (Verilog).

### **Personal Projects**

## Personal Website | HTML/CSS, JS, Google Sheets

- Developed a professional personal portfolio using HTML, CSS, and JavaScript characteristics.
- Exploited HTML/CSS tags to create responsive, visual effects.
- Created an automated text-receive system, storing contact information in Google Sheets.

# "Dice Art" Image Filter | Python, Streamlit

- a user is able to upload an image of their choice and have it visualized using only the six sides of a casino die.
- Leverages Python's imaging library (PIL) and Streamlit capabilities.
- Utilizes Streamlit's onboard functions to denote on-screen effects (loading bars, success messages, etc.)

#### Password Resilience Analyzer | C

- A chatbot-like program which utilizes a ranking system to denote the strength of an inputted password.
- Implemented a user-friendly interface where the user can pick one of three options prompted (Test new password, Check last password strength & Exit).
- Undergoes various conditions (uppercase, numbers, special characters) to construct a score of Weak, Moderate, and Strong.

#### Experience

Highschool Tutor (Math & Physics), Oakville, ON

2023 - PRESENT

#### AskTutors. INC

- One-on-one tutoring sessions (online + in-person) for high school students in Math and Physics, prioritizing individual learning gaps and enhancing overall understanding.
- Tailored lesson plans to meet diverse student needs and learning styles (inc. IEP).
- Monitored and assessed student progress, adjusting instructional techniques as needed to ensure optimal growth.

#### Customer Service Representative, Halton Hills, ON

2018 - PRESENT

#### **Petro Canada**

- Ensuring efficient operations at the retail fuel and convenience store.
- Tailoring to customer needs while maintaining seamless transactions and a clean, organized work environment.
- Maintaining clear and open communication with customers to ensure mutual understanding during transactions.

#### **Skills**

**Languages/Frameworks:** Java, Python, C, MATLAB, Verilog, Bash, HTML, CSS, JavaScript, Streamlit, PIL, NumPy, GitHub, Office 365. **Languages:** English (Fluent, Native), French (DELF B1 Certified), Punjabi (Full Verbal Proficiency).

Awards/Certifications: Dean's Honors List (May 2023) / Honor Roll since February 2016, Faculty of Engineering Award of Excellence (\$3000) + 2nd year stream selection (2023), \$2000 Oakville Rotary Education Award (2022), DELF B1 French Certificate (2022).