

Prinsa Patel

prinsaptl@outlook.com | (647) 571 7210 | [GitHub](#) | [LinkedIn](#) | [Website](#)

EDUCATION

University of Pennsylvania, *Masters in Computer Science (MCIT)*

Philadelphia, PA

Key Courses: Data structures & software design, Computer systems programming,
Algorithms and computation, Software development

Aug 2022 – Dec 2024

University of Toronto, *Honors Bachelor of Science with High Distinction, Biochemistry & Law*

Toronto, ON

Cumulative GPA: 3.83, Dean's List

Sept 2017 – Apr 2021

TECHNICAL SKILLS

Languages: Java, Python (Pandas, Matplotlib), JavaScript, TypeScript, C, SQL, HTML, CSS, Assembly, Bash

Framework and Tools: React, Firebase, Supabase, Git/GitHub, Docker, Vite

Additional: Agile Methodologies, Unit & Integration Testing (JUnit, Valgrind), Power BI, Tableau, AutoCAD

Certification: CodePath Intermediate Web Development (2023), Data Analyst (2021)

PROJECTS

SoundSpot

Dec – Jan 2024

- Engineered a **full-stack** music platform inspired by Spotify, offering anonymous interactions such as posts/likes, with a unique feature that allows users to connect their Spotify accounts for personalized insights.
- Developed using **React**, **Vite**, **Chakra UI** for frontend, **Supabase** for backend, and integrated **OAuth** with **Spotify API**, enabling seamless authentication and access to user-specific music data.

Civic Central

May – August 2023

- Built a civic engagement application using **React**, **Typescript**, and **Vite**, leveraging Google Civics **API** and Google Cloud Suite services to provide comprehensive election information based on user input.

Penn-Shredder

May – August 2023

- Designed and developed a shell in **C**, implementing process runtime restriction, input/output redirection, and two-stage pipeline, showcasing advanced **systems programming** skills and low-level system call proficiency.

COVID Data Analyzer

May – August 2023

- Utilized appropriate **data structures**, design principles, and patterns to create a **Java** application that reads and interprets CSV and JSON data files, employing a state machine approach, to extract content and perform analysis based on user input.

Text to Website

Sept – Dec 2022

- Leveraged the power of **Python** and **HTML** to launch a program that seamlessly transforms resume text files into visually appealing and professionally formatted HTML files.
- Debugged complex technical issues, such as parsing various data formats and optimizing performance, demonstrating analytical thinking and problem-solving skills.

Single-Player Game Suite

Sept – Dec 2022

- Developed "Blackjack" Solitaire, "Evil" Hangman, Tower Blaster, and Battleship game in **Java/Python**, showcasing ability to manage versions effectively using GitHub.
- Demonstrated expertise in key software design concepts, including comprehensive class structure design, meticulous documentation practices, and rigorous **unit testing**.

PROFESSIONAL EXPERIENCE

University of Pennsylvania

Philadelphia, PA

Teacher Assistant for Computer Systems Programming Course, Penn Engineering

Jan 2023 – Present

- Facilitating student learning through individual and group instruction, lesson planning, and assessment, as demonstrated by successful contributions to the academic success of **200+** students in MCIT.
- Strong organizational and communication skills by **leading** weekly debugging sessions, holding office hours, providing constructive feedback, and collaborating with faculty to build positive relationships.

Safetech Environmental Consulting Ltd.

Toronto, ON

Junior Engineer, Department of Engineering

May 2021 – Dec 2022

- Optimized technical product reports by analyzing data, creating clear and effective visualizations using **AutoCAD**, and delivering compelling conclusions to clients, resulting in a **20%** reduction in budget costs.
- Collaborated with cross-functional teams of engineers, and **lead** coding/marketing related projects to launch client satisfaction strategies, utilizing agile methodologies and industry trends.

Sunnybrook Health Sciences Centre

Toronto, ON

Clinical Research Analyst, Department of Anesthesia

Sept – Dec 2019

- Managed **4** anesthesiology research studies by examining daily patient chart reviews (**30+** charts daily) to collect relevant medical history and determine eligibility for each study.
- Maintained and updated RedCap system to capture and create clean databases for all clinical studies so that it can be used for **statistical analysis**.
- Presented and summarized weekly results to senior management to optimize recruitment strategies, which increased total study participants by **54%** across all ongoing studies.

ADDITIONAL INFORMATION

- Social Impact:** Co-Director for MCIT Student Association (2022-2023), Grace Hopper Attendee (2023), Admissions Ambassador (2023), Sickkid's Child Life Support (2017-2018), Math Kangaroo Coordinator (2018)