Pranshu Patel

University of Toronto || 3rd Year Computer Science

(647) 979-5948 | pranshu.patel@mail.utoronto.ca | pranshupatel | pranshup

Education

University of Toronto

Pursuing B.S. in Computer Science and minor in Mathematics — *Expected Graduation: April 2023*

- **Relevant Coursework:** *Ongoing:* Algorithms and Complexity, Operating Systems, Intro to Information Security
  Completed: Data Structures and Analysis, Software Tools and Systems Programming, Software Design, Theory of Computation.

Technical Skills

Programming Languages and Skills Python, Java, C/C++, HTML, CSS, JavaScript, TeX, Linux OS

Tools/Libraries/Frameworks PyGame, JavaFX, Bootstrap, Leafletjs, Git, Logism, LaTeX, Eclipse, PyCharm, VSCode

Projects

Wildfires Global - NASA SpaceApps Hackathon

Team — *October 2020*

- Created a web application that extracted real-time data from NASA Fire Map servers to deliver information about the nearest detected wildfire
- Utilized **NASA FIRMS Web Mapping Services** and **GIBS API** to integrate the wildfires on an interactive map along with various satellite layers
- Developed front end using **HTML**, **CSS**, **Javascript**, **Bootstrap** and **Leafletjs**. Used **jQuery** to extract and analyze the wildfire data from CSV files

Bulk File Manager

Individual — *January 2020*

- Developed a bulk file management system written in **Java**, utilizing **JavaFX** to allow users to conveniently perform useful actions on a large group of selected files such as renaming, relocating, merging, etc
- Implemented a smart renaming system that renamed multiple files at once based on user preferences
- Utilized **MVC structure** and **Observer** design pattern in order to maintain concise and reusable code

ColourBlock

Group Project - CSC290 — *December 2019*

- Worked with a team of 5 to develop a cloned version of the popular computer game Tetris using **PyGame**
- Created a **work breakdown structure** in order to plan out required tasks and corresponding deadlines
- Presented a **design review plan** to an audience, highlighting important design decisions chosen by the team

Reversi

Group Project - CSC207 — *October 2019*

- Worked with a team of 4 to create a GUI application of the board game "Reversi" written in **Java**
- Developed and utilized **greedy algorithms** to implement an AI bot for increased level of difficulty
- Used **design patterns** such as MVC, Factory, Visitor, and Observer to maintain flexible and reusable code for project efficiency
- Practiced **scrum** and **agile development methodology** with team of 4. Utilized **git** for version control

Work Experience

Mathnasium — *Milton, ON*

Math Instructor — *June 2019 - September 2020*

- Worked with a team of instructors to develop fundamental mathematical skills for children aged 8-17
- **Designed learning plans** to help upper level students with difficult concepts, such as Functions, Calculus, and Data Management
- Played a crucial role in the **transition from in-person to online tutoring** during the COVID-19 pandemic. Responsibilities included maintaining schedules, moderating online servers, as well as training colleagues and clients on proper use of the online system

Pakmen Volleyball Club — *Mississauga, ON*

Lead Coach — *October 2016 - April 2020*

- Coached weekend volleyball house leagues for children of various ages and skill levels
- **Served as the lead coach** for a team 3-4 coaches to ensure player development and enjoyment
- Led weekly summer camps with a team of 6-8 coaches for children of ages 6-13