

MAHIPAL RANA

msr.com | mahipal@my.yorku.ca | linkedin.com/Mahipal Rana | github.com/Mahipal Rana | 519-831-7960 |

EDUCATION

York University, Lassonde School of Engineering

Honours Bachelor of Science in Computer Science

Jan 2021 – Apr 2025

Toronto, ON

Courses: Data Structures, Design and Analysis of Algorithms, Software Design

PROJECTS

StockAlert360 | Python, News API, Twilio API

- Implemented an automated system that monitored stock prices and detected major movements, ensuring prompt notifications for informed decision-making
- Incorporated an automated news aggregator system utilizing the **News API** to fetch real-time news articles on stock price fluctuations; resulting in reduced research time, and saving over **20+** hours per week
- Integrated the **Twilio API** to implement real-time SMS notifications for stock news and price changes, increasing user engagement by **40%** and expanding reach to remote users

MyPass | Python, Tkinter, JSON, Pyperclip

- Developed a password manager application using **Python** and **Tkinter**, creating a user-friendly graphical user interface facilitating password generation with varying lengths, complexity, and requirements, thus increasing password strength by **70%**
- Created a highly secure **JSON** file system utilizing encryption techniques and data validation, ensuring data integrity and confidentiality; lowered the risk of security breaches by **75%** and enhanced password management efficiency by **40%**
- Streamlined user experience with one-click password copying feature using **Pyperclip** module; decreased time spent on manual password entry

Snap Stat | Bash

- Devised a **Bash** script that automates the generation of adjustable dimension thumbnail files for every file within a specified directory and the associated subdirectories
- Facilitated the automation of helper file generation for image data located in a designated directory and the accompanying subdirectories, encompassing the creation of metadata and thumbnails

CineFlix | HTML/CSS, Javascript, Node.js, Express, MongoDB

- Orchestrated the creation of a user-friendly and flexible user interface utilizing **HTML**, **CSS**, and **JavaScript**
- Leveraged Replit's platform to seamlessly develop server-side logic using **Node.js** and **Express**, effectively handling HTTP requests and responses while integrating **MongoDB** as the database for efficient storage and management of movie data

EXPERIENCE

Computing Support Assistant

University Services Centre at York University

Sep 2023 – Dec 2023

Toronto, ON

- Resolved technical issues promptly and efficiently, reducing service disruptions by **70%**
- Performed basic troubleshooting of various technologies and equipment, ensuring minimal downtime and uninterrupted operations

Frosh Week Volunteer

Lassonde School of Engineering

Sept 2022

Toronto, ON

- Executed and monitored events for about **400** new undergraduate students during Frosh Week, creating a welcoming and inclusive environment
- Managed all aspects of event planning and logistics for **15+** events, from venue selection and vendor negotiation to budget management and marketing; achieved **95%** attendee satisfaction rate

TECHNICAL SKILLS

Languages: HTML/CSS, JavaScript, Java, Python, C/C++, SQL, Bash

Tools & Frameworks: Node.js, Express, MongoDB, JQuery, Bootstrap, Pandas, Git