Shadman Kaif

COMPUTER ENGINEERING STUDENT

CONTACT

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SKILLS

Languages

C++ | C | Python | JavaScript | MatLab | HTML/CSS | Verilog | Assembly

Systems, Frameworks & Tools

Quartus | Scrapy | Selenium | Node.js | Linux | Mac OS | Git | Visual Studio | Jupyter Notebook | PowerBI | OpenCV | NLP

EDUCATION

University of Toronto
BASc - Computer Engineering
3rd Year
Robotics & Mechatronics Minor
2018 – 2023

AWARDS

Edward S. Rogers Admission Scholarship (June 2018)

UofT Scholar's Award (February 2018)

International Baccalaureate Diploma (July 2018)

Core French Completion (June 2018)

INTERESTS

Data Analysis

Web Development

Web Scraping & Automation

Music

Sports

WORK EXPERIENCE

Ontario Treasury Board Secretariat — May 2020 – September 2020

Data Science Intern

- Contributed to advance ongoing database project with the help of **SQL Server** and **Python**
- Increased data points reported by **90%** by transitioning from restricted MS Access platform to an industry-standard
- Optimized usability of a Collective Agreement Costing tool by updating it to AODA Accessibility Standards
- Designed and implemented test cases that decreased fatal crashes by **85%** through architecting rigorous test cycle and development of the Collective Agreement Costing Tool
- Created numerous web scrapers using **Python** and **Scrapy** and presented findings using **PowerBI**
- Analyzed the polarity and subjectivity of tweets from unions in Ontario using **Python** and **Natural Language Processing**

Berry Road Food Co-op — January 2019 - April 2019

Design Team Member

- Worked alongside five other engineering students as part of the Engineering Strategies & Practices II project
- Given a client statement, the team created **Project Requirements** and **Conceptual Design Space** documents in which the client's problem was identified and three engineering solutions were pitched
- Presented the final three engineering students to the client, fellow engineering students and University of Toronto professors

Sata Computers Inc. — May 2019 - August 2019

Technical Associate

- Identified customers' desired products and was able to sell the products accordingly
- Informed and educated the customers about business partners associated with the company such as ACN and Xoom Energy
- **Removed malware** on desktops, installed Microsoft Office on computers, and replaced screens on computers
- Replaced toners on printers, and learned about various parts of computer hardware and software

Bengali Information and Employment Services — June 2018 - August 2018

Community Development Assistant

- Created **online adverts** and assembled a team of twenty-three volunteers for fundraising
- Updated the organization's website frequently using **WordPress**
- Created and promoted flyers using **Adobe Photoshop** to promote the non-profit organization's events such as the annual general meeting and the job search and networking building workshop

PROJECTS

PYNQ Eye | Python, OpenCV (MakeUofT 2020 Winner) — February 2020

- Created a facial and optical recognition program using Python
- Used Xilinx's PYNQ-Z1 board for hardware acceleration and efficiency
- Trained Neural Network XML using image databases of human faces and eyes
- Executed the program on Jupyter Notebook, a modular run-time environment

Canada Jobs Web Scraper | Python, Scrapy, PowerBI — May 2020 – August 2020

- Created a Python script that uses Scrapy to scrape over 35,000 jobs within the official Canada job banks website
- Updated Python script regularly to account for internal update such as CSS selectors
- Designed a dashboard within PowerBI using the data accumulated from the Python script
- Used NOC Hierarchy to filter data which is relevant to government analysis

Geographical Information System | C++, OSM API — January 2020 – April 2020

- In a team of 3, created a Geographical Information System with similar functionality to Google Maps using C++, EZGL and OpenStreetMap's raw data
- Implemented Dijkstra and A*'s algorithm to solve travelling salesman problem
- Designed APIs, data structures and algorithms to sort and search through over 20 million data points
- Designed a graphical UI system for concise and accurate presentation of information

Others: Hot Wheels Car Racing Game, Asteroid Shooting Game AI, Crazy Taxi Game, Binary Search Tree Domain Name Server, Twitter Sentiment Analyzer