

## EDUCATION

- Bachelor Of Mathematics (Honors), University Of Waterloo (Sep 2021- April 2026)
- Intended Major – Statistics with Minor in Combinatorics.

## SKILLS

- Languages and Libraries:- Python, SQL, R, Excel, Power BI, Microsoft Azure, Tableau, Scikit-learn, TensorFlow, Keras, Pandas, NumPy, Matplotlib
- Certifications:- Google Data Analytics, IBM Machine Learning Professional Certificate (2/6)
- Familiarity with machine learning models:- Ridge, Lasso, Polynomial, Linear, Elastic Net Linear, Regression models
- Designing:- Adobe Pro DC, Adobe Spark, Canva

## WORK EXPERIENCE

### QUALITY DATA ANALYST:- HATCH Ltd, Mississauga, ON, Canada. May-Aug 2022

- Assisted in audits, including creating and closing out audit findings, drafting reports and determining proper corrective and preventive measures following the **ISO standards**.
- Built Power BI dashboards for gaining insight and visualizing unused data to perform co-relational analysis. This aided in **framing policies for better decision making**.
- Calculated project risk. Automated email alerts by building a pipeline between Ipas SM and Ipas DM to **Quality Leads using Hatch internal document sharing systems thus reducing 20 minutes of real office time daily**.
- Analyzed factors affecting client satisfaction, quoted prices in **Project Bidding** and **created win-win situation leading to more successful Project Bidding**.
- Automated the process of EDA of data using SQL for analysts and Quality Leads. Reduced the runtime of queries by 12% by eliminating redundant data.

### DATA ANALYST INTERN: BLOOD BANK, Action Cancer Hospital 2020

- Created Pivot tables using Excel and graphing functions using hospital database to analyze 10+ GB of time series data to integrate relationship of Donor's gender, age, Blood sample and Frequency of Donation.
- Conducted data cleansing, EDA and analysis using Python. It depicted maximum donors' in the age group 25 to 35 years and found an increase in the number of donations when an auspicious festival neared.
- Aided in decision-making process by introducing incentives like gratis medical treatment.
- Long-time donors were given gift hampers and benefits to encourage them to donate more.

## PROJECTS

### MALARIA IMAGE PROCESSING DETECTOR 2023

- Developed and trained a **Malaria Binary Image Classification Deep Neural Network model** which detects the presence of malaria as a parasite in blood cells using dataset of red blood cell images using **TensorFlow, Keras, OpenCV** and **Matplotlib**.
- Used 27.6K images to train the model with a train:test:validation split of 70:20:10.
- Achieved a 95.75% accuracy rates and 95% validation accuracy.

### COMMENT- TOXICITY MODEL 2022

- Developed a Deep Neural Network Comment Toxicity Model using TensorFlow and Keras, **Pandas and NumPy** to detect the intensity of toxicity, obscenity and threat level of the comment by performing NLP.
- The model is linked with **Gradio App** having link being active for 72 hours. The dataset is leveraged from **Kaggle Toxic Comment Classification Challenge**.
- Achieved 87% precision rate with 84% accuracy rate.

### BITCOIN PRICE PREDICTION Dec 2021

- Used Pandas for Data manipulation, Facebook Prophet for forecasting and **Plotly** (Including Violin Plots) for Data Visualisation.
- Worked on Google Finance to observe trends and forecast prices of Bitcoin for 2022 with 83.33% accuracy in projections.

### TITANIC SURVIVAL KAGGLE COMPETITION 2022

- Developed a predictive model showcasing rate of passengers that survived the Titanic shipwreck using **Logistic Regression, Scikit learn and Pandas**.
- This model was submitted in the Kaggle -Titanic Machine learning from disaster competition. It examines the survival rate of passengers depending upon their gender, age and socio-economic classes as the main factors.
- Used **Matplotlib** to plot the results of the predictions and its outliers. After testing, the model has an accuracy of 81%.

## ACHIEVEMENTS

- **DIRECTOR** of First Year Affairs: **UWaterloo MathsSoc** May-Aug 2022  
Enrolled 80+ students across campus with 8 different Math majors. Headed communication and promoted events on social media channel.
- MATHSOC MARKETING DIRECTOR Sep-Dec 2022
- **UWACTSCI Publicity Director** Present