# **Utsav Shinghal**

437-970-4272 | ushinghal19@gmail.com | **in** ushinghal19 | 🗘 ushinghal19 | 🗞 ushinghal19.github.io

Driven computer science and mathematics student interested in Software Development, Quantitative Finance and Artificial Intelligence. Lived in 7 countries across 3 continents gaining a multi-cultural, diverse perspective and strong collaboration skills.

#### EDUCATION

# University of Toronto

Bachelor of Science in Computer Science and Mathematics (3.93/4.00)

September 2019 - April 2023

- 1/25 students selected for the **Technology Leadership Initiative**, a program that offers industry integrated learning and leadership training for high-achieving computer science students.
- Course Developer (Foundations of Computer Science I/II)
- Teaching Assistant (Calculus I/II)

# Skills and Interests

Programming Languages: Python, C, Shell, JavaScript, Java, Swift, Q, HTML, CSS, R, LaTeX

Libraries & Tools: Numpy/Pandas, Streamlit, Django, Flask, GraphQL, ReactJS, Git, Jira, Bamboo, Slurm

Languages: English (fluent), Hindi (fluent), Spanish (intermediate), Chinese (novice)

Interests: Chess, Poker, Scuba Diving, Guitar, Soccer/Tennis, Formula 1

# Work Experience

# Squarepoint Capital

Montreal, QC

Software Engineer Intern

May 2021 - August 2021

- Improved back-end memory efficiency by over 40% by compressing datatypes in **Pandas**' dataframes and splicing **Slurm** jobs allowing over 20 quantitative researchers to use larger datasets for analysis.
- Created a full-stack internal application to monitor machine learning runs for researchers using **Python** and **Streamlit**
- Made key enhancements to quantitative tools (alpha testing, data analysis etc) created for researchers using **Streamlit** improving accessibility, efficiency and reliability and deployed these changes internally.

Shopmatic Singapore

Software Engineer Intern

August 2020 — October 2020

- Increased customer checkout efficiency by 15% by integrating their checkout form with the Google Maps API react-geosuggest for auto-filling shipping address / location.
- Expanded upon numerous capabilities in the front-end, such as showing detailed error messages and placeholder suggestions, making their interface more user-friendly using **React** and **Redux**.

# Projects

TickerTrakr | Python, Flask, HTML, CSS, JavaScript, API's

 $View\ on\ GitHub \rightarrow$ 

- Winner at Hacklytics, Georgia Tech's Data Science Hackathon.
- Developed a full-stack application within 36 hours that uses the **Twitter-API**, **Reddit-API** and **Finnhub-API** to see how many times stock tickers are being mentioned on social media platforms, allowing users to make informed investing decisions.

Teacher's Portal | Python, Django, React, MongoDB, API's, GraphQL

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- Developed a full-stack web application using Django serving a GraphQL API with React as the frontend.
- Created this project in a team of 5 for the company **Hypatia** using their Check-Math API.
- Created models and schema in the back end, as well as statistics gathering functions from the API.
- Displayed informative statistics in the front-end using the React library Victory.

Tennis Analysis [Research] | Python, Selenium, Statistics, Mathematics

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• To what extent does the deuce scoring system in tennis benefit the better player, and by how much? (5701 words)

#### Leadership

Director of Internal Affairs | Computer Science Student Union

September 2020 - August 2021

- Elected Director of Internal Affairs by students in Computer Science at UofT.
- Planned a unique and innovative freshman student orientation during COVID19 for 200 first-year students.
- Co-leading a 6 million dollar advocacy initiative for equitable tuition fees for CS students at UofT

## First Year Representative | Computer Science Student Union

August 2019 - June 2020

- Responsible for representing the concerns of the first year class to the CS Department, and planning academic, social and professional events.
- Organised and ran a first-year study session for **50** students before final exams.