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## GITHUB | LINKEDIN | MEDIUM

## **Education** —

## **Bayview Secondary School**

Richmond Hill, Ontario

International Baccalaureate Diploma

September 2017 - Present

- Relevant Courses Chemistry (HL), Economics (HL), English (HL), Biology (SL), Calculus (SL), French (SL), TOK (SL)
- Academic Performance Honour Roll (2017 Present). Current weighted average: 96%
- Alternative Coursework and Certification Harvard CS50x (edX), Stanford Machine Learning (Coursera)

## Work Experience —

## The John Dick Lab, Princess Margaret Cancer Centre, UHN

Toronto, Ontario

Research Intern

September 2020 - Present

• Identifying prognostic and predictive biomarkers and profiling tumour ecosystems with single-cell RNA sequencing to elucidate the mechanisms and interactions of Acute Myeloid Leukemia for targeted therapeutics development

## The Pugh Lab, Princess Margaret Cancer Centre, UHN

Toronto, Ontario

Student Researcher

October 2020 - Present

- Researching novel single-cell RNA sequencing techniques to profile heterogeneous tumor microenvironments at single-cell resolution to understand drug resistance, stem cell programs and tumor proliferation
- Advancing the development of CReSCENT- an intuitive and containerized pipeline execution engine for standardized analysis of single-cell RNA sequencing data including normalization and cell clustering

#### The Grover Lab, St. Michael's Research Centre

Toronto, Ontario

Keenan Research Summer Student

June 2019 - July 2019

- Researched the transfer of endoscopic skills with an endoscopic simulation curriculum using EndoVR (CAE Healthcare) a high-fidelity interventional virtual reality endoscopic simulator
- Supported UoFT Medical residents (course participants) in troubleshooting difficulties with the virtual reality system, assisting with data entry tasks, patient roleplays and reporting simulation-collected performance metrics

## Baylor Scott and White Health

Dallas, Texas

Summer Intern

August 2019

• Shadowed physician rounds working in fields of trauma, hematology, and internal medicine in both the hospital and out-patient clinic environment at Texas' largest healthcare system

## Spastics Society of Karnataka- Centre for Developmental Dissabilities

Bangalore, India

Teaching Assistant and Curriculum Developer

July 2017

- Developed computational literacy and English curriculums and assisted with teaching in classroom setting of 20 students while hosting 1-on-1 mentorship sessions
- Created 100-slide interactive life skills powerpoint series

## **Volunteer Experience** —

### The York Region Presidents' Council

York Region, Ontario

Prime Minister

September 2018 - Present

- Coordinated 11 executives to execute monthly general assemblies and bi-annual conferences for students from 33 secondary schools. Organized school board's largest student-run mental health and student wellbeing conference
- Represented 130,000 students of YRDSB at school board meetings
- Increased event attendance from 20 to 1,300 (virtual) attendees in 3 years and grew social media 6,000%
- Secured \$30,000 in funding and created sponsorship materials to collect \$3,000 of monetary and in-kind donations

Suraj Bansal

#### The Richmond Hill's Youth Action Committee

#### Richmond Hill, Ontario

Director of Logistics

September 2016 - Present

- Coordinated internal team of 35 members for the conceptualization and execution of city-wide events to promote community involvement for youth of Richmond Hill, attracting nearly 300 event attendees
- Created sponsorship materials, collecting total \$1,500 worth of donations and event programmes/itineraires

### **Bayview Secondary School Student Council**

Richmond Hill, Ontario

Grade 9 Representative

September 2017 - June 2018

- Represented 400+ Grade 9 students and was invited to represent Bayview at the YRDSB Unity Rally, Ring of Peace
- Contributed to the execution of school events, fundraisers and semi-formal for over 1,500 students

## First Nations High-Five Initiative

Thunder Bay, Ontario

Founder and Chairman

September 2016 - September 2017

• Coordinated internal volunteer team of 50 students to launch community-wide fundraisers, collecting \$4,500 in school supplies donations for the Nibinamik (Summer Beaver) First Nations Reserve in Thunder Bay, Ontario

## **Projects Highlights** —

#### Ryde- Autonomous Vehicles. Democratized | Learn More

Company Website

- Open-source self-driving software to democratize autonomous vehicles
- Leverages bluetooth to interface vehicle diagnostics with a smartphone application, enabling self-driving features

## Sidewalk Labs Consulting Recommendation| Learn More

November 2019 - February 2020

• Created innovation plan to reduce household expenditures through shared economics and an end-to-end platform that monetizes personal assets (selected from 35 teams to present at Sidewalk Labs headquarters to C-level team)

## Kidogo Consulting Recommendation| Learn More

March 2020 - April 2020

• Increased mamapreneur profits with community sensitization workshops, sack farming pilot programs, revamped the curriculum research and development process and expedited strategic partnership contracts

#### Polyp Detection | Learn More

Github Repository

• Leveraged convolutional neural networks with an accuracy rate of 93% (20% higher than industry)

## Apple Stock Prediction | Learn More

Github Repository

• Used an LSTM Network to predict Apple Stock Prices with an accuracy rate of 98.3%

# Skills Summary —

- Programming Languages Python, HTML, CSS, Javascript, C/C++
- Platforms and Technologies Tensorflow, NumPy, Pandas, Scikit-Learn, Matplotlib, Git, Scanpy, Anndata
- Miscellaneous Skills Guitar, Cooking, Hockey, Running