James Ross

Data Scientist, UBC Computer Science Student

jamesrosstwo jamesross.xyz jamesrosstwo james@jamesross.xyz (647)-229-0035

PROFESSIONAL EXPERIENCE

RBC, Toronto, ON - *Data Scientist, UBC Co-op Student* May - Aug. 2020 & Jan. 2021 - Now

- Developed a graph-based solution using NetworkX and PySpark to detect clusters of synthetic accounts used for fraud within RBC. The approach detected known synthetic accounts and discovered new, previously unseen synthetic accounts in production data.
- The new graph-based solution discovers clusters of synthetic accounts automatically and proactively as well, versus the previous reactive method of discovery.
- Currently working to enrich a Neo4J graph database in order to make more accurate inferences, with plans to build a model that identifies important areas of the graph to reduce false positives.

IBM, Markham, ON - *Software Development Summer Student* July - Aug. 2018 & 2019

- Created new administrative tools used on portals in the IBM Developer Skills Network, a cloud-based platform that enables organizations to deploy customizable data science education portals.
- Built new learning competition functionality and improved portals' chatbots for users.
- Developed a structure to maintain an up to date version of OpenEdX on portals

CURRENT UBC STUDENT TEAMS

BEAR UBC, Vancouver, BC - *Analytics Team Lead* Sept. 2019 - Now

- Accepted from a pool of applicants as a software developer. Currently leading the analytics team for GRASP, a prosthetic hand controlled with electromyography with plans to compete in ETH Zurich's Cybathlon 2021.
- Developing solutions such as determining the optimal grip pattern to pick up held objects, haptic feedback using vibrational motors, and shape classification of held objects.

UBC RoboMaster, Vancouver, BC - *Technology Lead* Sept. 2019 - Now

- Accepted from a pool of applicants as a developer. Leading development for a team of 15 to deploy onto a series of robots that will compete in DJI's Robomaster 2021.
- Designed the structure of our solution to DJI's AI challenge and am currently developing a reinforcement-learning algorithm to help the robots choose where to move and aim.

EDUCATION

University of British Columbia, Vancouver, BC Sept. 2019 - May 2024

Faculty of Science, Year 2, Computer Science Major (Co-op)

- Overall Average: 86%, Dean's Honour List
- Tuum Est Experiential Award, $3500 entry scholarship

SKILLS & INTERESTS

Proficient in: Python, Pytorch, Spark, Pandas, Arduino, C++, React, Javascript, Java, Git

Participate in: Theatre, skiing, biking, cooking (hopeful future Hell's Kitchen participant)