

# RUYI QU

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## EDUCATION

**University of Toronto**, Toronto, ON

June 2022

*Bachelor of Science in Mathematics and Its Applications in Probability and Statistics*

*Double degree in Cognitive Science with a focus on Computational Cognition*

- Course Highlights: || Python/R Programming || Linear Algebra || Advanced Calculus || Discrete Mathematics || Probability and Statistics || Machines and Mind || Cognitive Neuroscience || Machine Learning ||
- Last Term **GPA: 3.94/4.0**

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## WORK EXPERIENCE

**For A Safer Space**, Toronto, QN

September 2020 – Present

*Product Analyst Intern*

- Drove marketing strategy by conducting competitive analysis using Excel and creating visually engaging and easy-to-understand reports with PowerPoint and SQL for presentation to the team.
- Contributed to strategic product decisions to better serve the needs of the public and ensure affordable, accessible health care for all individuals.
- Grew LinkedIn followers to more than 500 and partnered with more than 50 psychotherapists to provide free workshops and 1-on-1 mental health counseling sessions for hundreds of people worldwide.
- Improved website design and functionality by coordinating with management to fix outdated / broken links and buttons.
- Assisted product development and marketing teams to ensure new product set-ups adhered to system requirements.
- Provided data analysis to support development of new and enhanced products and reporting.

**Huawei Canada**, Toronto, QN

May 2020 – December 2020

*Data Analyst Intern*

- Identified the best possible job candidates by conducting research, gathering data and providing analysis in regard to AI talent mapping.
- Strengthened decision making of management by using a broad set of analytical tools and techniques (Excel, Python, etc.) and delivering quantitative and qualitative insights.
- Worked collaboratively with the HR team to translate requirements into meaningful data and insights.

**Zixun Education**, Toronto, ON

February 2019 – Present

*Private Academic Instructor*

- Customized tutoring and instructional approaches to meet the needs of diverse client populations.
- Boosted GPA and test scores for dozens of students by more than 10% while teaching in both 1-on-1 and group settings.
- Ensured all tutors provided quality learning environments by designing math and English courses and training new tutors in course-instruction methods.

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## PROJECTS

**VinBigData Chest X-ray Abnormalities Detection**

December 2020 – March 2021

- Localized and classified thoracic abnormalities from chest radiographs by building models with Python.
- Trained model with 15,000 independently labeled images and evaluated a test set of 3,000 images.
- Awarded a bronze medal for Top 9% finish of 1,300 teams in the Kaggle Competition.

**Cassava Leaf Disease Classification**

November 2020 – February 2021

- Reduced crop destruction for farmers by allowing for more efficient and accurate identification of diseased plants by classifying cassava images into four disease categories and a fifth healthy category.
- Built two models in Python (ResNet50\_32x4 and EfficientNet-B4) using various machine learning libraries (Torch, Scikit-learn, OpenCV, pandas, NumPy, matplotlib) and implemented 5-fold cross-validation on dataset.
- Achieved a bronze medal and Top 8% finish out of 4,000 teams in the Kaggle competition.

## SKILLS

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**Programming Languages / Software:** Python || Java || R || SAS || MySQL || Tableau || LaTeX || Advanced Excel ||  
**Libraries:** Scientific Computing (NumPy, SciPy) || Data Manipulation (Pandas) || Machine Learning (Scikit-Learn, PyTorch, Keras, TensorFlow) || Visualization (Matplotlib, Seaborn)