

# Ruyi Qu

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## SKILLS & CERTIFICATIONS

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<b>Programming</b>	SQL, Python, R, PySpark, Java, C/C++
<b>Analytics</b>	Excel, Tableau, GA4, Power BI, Looker, Google Tag Manager, Amplitude, Shopify
<b>Big Data</b>	GCP, AWS, Hadoop, Spark, DBT, Snowflake
<b>Modelling</b>	Machine Learning, Deep Learning
<b>Version Control</b>	GitHub, Git
<b>Digital Advertising Platforms</b>	Google Ads, TikTok Ads, Pinterest Ads, Meta Ads, DV360, The Trade Desk (TTD), Snapchat Ads, Amazon Advertising, CM360, AdTheorent, StackAdapt

## EDUCATION

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- Certificate in Digital Marketing Analytics** | York University, Toronto, Canada *Jan 2025 – Present*
- Master of Science in Computer Science** | Georgia Institute of Technology, Georgia, USA *Sep 2023 – Present*  
• Specialization: Machine Learning
- Master in Big Data and Business Intelligence** | Escuela de Negocios Europea de Barcelona, Spain *Sep 2022 – Sep 2023*  
• Course Highlights: Customer Analytics, Big Data Marketing, E-Commerce
- Bachelor of Science** | University of Toronto, Toronto, Canada *Sep 2018 – Sep 2022*  
• Double major: Mathematics & Cognitive Science

## WORK EXPERIENCE

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- Knix** **Toronto, Canada**  
**Senior Marketing Science Analyst** *Sep 2024 – Present*
- Improved ROAS by **15%**, reduced CAC by **20%**, and lowered CPM by **18%** through targeted insights and data-driven recommendations for campaign optimizations.
  - Automated workflows for budgeting and billing in collaboration with the Finance team, transitioning manual processes to Looker, saving over **10 hours weekly** across Finance and Marketing teams while increasing reporting accuracy by **30%**.
  - Designed and implemented experimental frameworks, including randomized control testing, resulting in channel efficiency gains of **25%** and validating high-impact strategies for growth.
  - Onboarded MTA and MMM platform (NorthBeam), improving multi-channel attribution and marketing mix analysis, enabling accurate assessment of **\$70M+** in annual marketing spend.
  - Partnered with Growth and Retention teams to conduct analyses such as cohort performance tracking, churn prediction modeling, and LTV segmentation, driving a **10% improvement in customer retention** and a **12% increase in customer acquisition efficiency**.
  - Built and maintained key datasets and BI dashboards, delivering visualizations that reduced data query times by **40%** and supported leadership in achieving ambitious revenue goals.
  - Led weekly marketing analytics meetings with **10+ stakeholders**, aligning teams across channels and embedding a data-first culture in strategic planning.
  - Solved complex analytics challenges, uncovering hidden insights that increased campaign targeting precision, improving click-through rates (CTR) by **12%** and conversion rates by **8%**.
- Hotspex Media** **Toronto, Canada**  
**Senior Data Analyst** *Nov 2022 – Sep 2024*
- Led data analytics for an ad pod, managing end-to-end marketing performance analytics for a dedicated client base.
  - Orchestrated data integration into BI platforms, creating engaging visualizations and custom metrics, guiding decision-making by utilizing Campaign pacing reports and insights.
  - Spearheaded quarterly business reviews (QBRs) and detailed marketing analyses for major clients, influencing key strategic decisions.
  - Led advanced marketing science projects, including but not limited to Dupont Analysis, Incrementality, and Efficiency/Effectiveness, RFM Analysis to present findings to clients.

- Developed and utilized SQL queries for multiple clients to analyze ROAS, and CAC for marketing channels resulting in a **20% increase in marketing campaign efficiency** through precise exploratory data analysis.
- Achieved an increase of **5% in ROI** by modelling a Markov chain attribution to work with Google's DDA model to attribute conversions to online sources using data from Google Analytics 360.
- Collaborated closely with Marketing stakeholders and client service teams, providing quality insights for ad hoc requests and bolstering seamless operations.
- Assisted in MMM and MTA deployment, implementation and insights reporting for various e-commerce clients resulting in overall spend and ROAS efficiency.
- Trained and mentored junior and senior team members, including full-time data analysts and a tag implementation intern, fostering professional development within the team.

## RallyCry Ventures

**Boston, USA**

### Venture Capital Data Analyst

*Mar 2021 – July 2021*

- Conducted advanced data analytics and quantitative analysis on investment portfolios, providing insightful suggestions to help investors make wise and successful decisions.
- Dealt with large datasets, and used SQL to curate the data and Tableau to create interactive dashboards.
- Built a start-up success prediction model using machine learning algorithms (Random Forest, LGBM, XGBoost, etc.), achieving a **70% accuracy rate** to effectively support crucial investment decisions and **increase ROI by 20%**.
- Managed a data automation project, changed monthly from manual Excel loading to SQL auto-refresh on Tableau, significantly improving data **reporting and visualization efficiency by 40%**.

## Huawei Canada

**Toronto, Canada**

### HR Data Analyst

*May 2020 – Dec 2020*

- Collaborated with the HR talent acquisition team to conduct data analysis, visualization, and reporting.
- Built a logistic regression model to analyze significant factors which influence employee turnover, providing actionable suggestions to reduce employee churn.
- Created interactive dashboards using SQL and Tableau, demonstrating monthly data insights and descriptive statistics.
- Automated the process of extracting and cleaning external talent acquisition data, **improving hiring efficiency by 4%** and effectively improving the quality of hire.
- Utilized Python API to request and analyze data, automating dashboard generation and supporting stakeholders to make right and wise decisions.

## For a Safer Space

**Toronto, Canada**

### Product Analyst

*Sep 2019 – May 2020*

- Responsible for developing marketing strategies for the marketing analytics team, providing data insights and evidence-based suggestions to increase sales and maximize revenue.
- Led product engagement campaigns to increase brand awareness and promote new products, using data as evidence to support decisions and successfully increase product sales by 18%.
- Used Excel, Google Analytics and Tableau to monitor website KPIs (visitor number, average session duration, conversion rate, etc.), recommending personalized products for customers based on their preferences and needs.

## HappyPaws Pet Products

**Changchun, China**

### Marketing Data Analyst

*Apr 2018 – Sep 2018*

- Analyzed customer data to identify trends in pet product purchases, preferences, and behaviours, providing actionable insights to enhance marketing strategies.
- Managed and organized large customer datasets using SQL, and created clear reports and visualizations with Excel and Tableau, enabling targeted and personalized marketing efforts based on customer segments and purchasing patterns.
- Conducted experiments to test the impact of various promotions and offers on customer behaviour and sales, leading to a **20% increase in customer retention** through data-driven marketing strategies.
- **Increased average order value (AOV) by 10%** by identifying and leveraging cross-selling and up-selling opportunities through detailed analysis of customer purchasing patterns.

## PROJECT EXPERIENCE

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

### **Cassava Leaf Disease Classification (Kaggle Competition)**

2020

- 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 training datasets.
- Achieved a bronze medal and Top 8 percent finish out of 4,000 teams in the Kaggle competition.

### **PUBLICATIONS**

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1. Qu, R.; Xiao, Z. An Attentive Multi-Modal CNN for Brain Tumor Radiogenomic Classification. *Information* 2022, 13, 124.
2. Yahan, K., Qu, R., & Xiaoxia, L. (2022). Classification Of Fake News Headlines Based On Neural Networks. *arXiv preprint arXiv:2201.09966*.

### **CERTIFICATIONS**

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1. Certified Tableau Desktop Specialist
2. Certified Power BI Data Analyst Associate
3. AWS Certified Cloud Practitioner