Ruyi Qu

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SKILLS

Programming	SQL, Python, R, PySpark, Java, C/C++
Analytics	Excel, Tableau, Google Analytics 4, Power BI, Looker, Google Tag Manager
Big Data	GCP, Hadoop, Spark, DBT
Modelling	Machine Learning, Deep Learning
Version Control	GitHub, Git
Digital Advertising Platforms	Google Ads, TikTok Ads, Pinterest Ads, Meta Ads (Facebook and Instagram), DV360, The Trade Desk (TTD), Snapchat Ads, Amazon Advertising, CM360, AdTheorent

EDUCATION

Master of Science in Computer Science, Georgia Institute of Technology   **Part-Time Remote**
- Specialization: Machine Learning   *Sep 2023 – Present*

Bachelor of Science, University of Toronto   **Toronto, Canada**
- Double major: Mathematics & Cognitive Science   *Sep 2018 – Sep 2022*
- Research specializations: Machine learning, Deep learning

WORK EXPERIENCE

Hotspex Media   **Toronto, Canada**
  Senior Data Analyst   *Jan 2024 – Present*
  Junior Data Analyst   *Nov 2022 – Dec 2023*
- Promoted after 1 year for superior performance.
- Led data analytics for an ad pod, managing end-to-end analytics for a dedicated client base.
- Implemented advertising pixels via Google Tag Manager, utilizing JavaScript expertise for precise data collection.
- Oversaw ETL workflows, ensuring data integrity and quality, resulting in a 30% reduction in data discrepancies.
- Orchestrated data integration into BI platforms, creating engaging visualizations and custom metrics, guiding decision-making and adding unique insights.
- Spearheaded quarterly business reviews (QBRs) and detailed marketing analysis for major clients, influencing key strategic decisions.
- Developed and executed SQL queries, contributing to a 20% increase in campaign efficiency through precise data analysis.
- Improved operational processes and efficiency, leading to a 15% increase in team productivity and client satisfaction.
- Collaborated closely with campaign management and client service teams, providing timely assistance for ad hoc requests and bolstering seamless operations.
- Trained and mentored junior team members, including a full-time data analyst and a tag implementation intern, fostering professional development within the team.
- Led advanced marketing science projects, including Dupont Analysis, Incrementality, Efficiency/Effectiveness and present findings to clients.

RallyCry Ventures   **Boston, U. S.**
  Venture Capital Data Analyst   *Mar 2021 – July 2021*
- Conducted advanced data analytics and quantitative analysis on investment portfolio, proving insightful suggestions to help investors make wise and successful decisions.
- Dealt with datasets with more than three million rows, and used SQL to manage datasets and Tableau to create interactive dashboards.
- Built a start-up success prediction model using machine learning algorithms (Random Forest, LGBM, XGBoost, etc.), achieving 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%.

For a Safer Space | **Toronto, Canada**
  Product Analyst | *Sep 2020 – May 2021*
- Responsible for developing marketing strategies at 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.

Huawei Canada | **Toronto, Canada**
  HR Data Analyst | *Sep 2020 – May 2021*
- Collaborated with HR talent acquisition team to conduct data analysis, visualization, and reporting.
- Built 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.

HappyPaws Pet Products | **Changchun, China**
  Marketing Data Analyst | *Apr 2018 – Sep 2018*
- Analyzed customer data to identify trends in pet product purchases, preferences, and behaviors, 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 behavior 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

VinBigData Chest X-ray Abnormalities Detection (Kaggle Competition) | *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 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

1. Qu, R.; Xiao, Z. An Attentive Multi-Modal CNN for Brain Tumor Radiogenomic Classification. *Information 2022*, 13, 124.
2. Qu, R., Yang, Y., & Wang, Y. (2021, December). COVID-19 detection using CT image based on YOLOv5 network. In *2021 3rd International Academic Exchange Conference on Science and Technology Innovation (IAECST)* (pp. 622-625). IEEE.
3. Qu, R., Huang, S., Zhou, J., Fan, C., & Yan, Z. (2022). The vehicle trajectory prediction based on ResNet and EfficientNet model. *arXiv preprint arXiv:2201.09973*.

4. Yahan, K., Qu, R., & Xiaoxia, L. (2022). Classification Of Fake News Headline Based On Neural Networks. *arXiv preprint arXiv:2201.09966*.