

RUI QIU

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EDUCATION

- **Georgetown University** Washington D.C., United States
Master of Science in Data Science and Analytics. cGPA: 4.0 Aug. 2021 – May 2023 (Est.)
- **The Australian National University** Canberra, Australia
Master of Science in Statistics Feb. 2017 – Dec. 2018
- **University of Toronto** Toronto, Canada
Honors Bachelor of Science with Distinction (Maths, Statistics and Computer Science) Sept. 2011 – June 2016

SKILLS

- **Programming:** SQL, Python, R, JavaScript, HTML, CSS, Java
- **Machine Learning:** tidyverse, tidymodels, caret, jupyter-notebook, scikit-learn, numpy, pandas
- **Visualization:** ggplot2, Shiny, d3.js, matplotlib, seaborn, plotly, leaflet, bokeh
- **Data Science:** A/B testing, ETL, pipeline (cleansing, wrangling, visualization, modeling, interpretation), scraping, feature engineering, NLP, cluster analysis, time series analysis, PCA, stochastic process, experimental design, hypothesis testing
- **Big Data & Miscellaneous Technologies:** AWS (EC2, EMR, S3, SageMaker), Azure, Databricks, Spark, Hadoop, MongoDB, Docker, Linux, Shell, Hugo, Figma

EXPERIENCE

- **International Finance Corporation (World Bank Group)** Washington, D.C.
Data Scientist May 2022 – Present
 - Develop and fine-tune transformer-based language models using state-of-the-art techniques, such as BERT or GPT-3
 - Train the model on large and diverse historical text corpora from IFC, resulting in a robust and high-performing language model that can generate coherent and contextually appropriate text
 - Conduct extensive experimentation and hyperparameter tuning to optimize the model's performance on various language tasks, such as text classification, sentiment analysis, and question answering
 - Evaluate the model's performance using both established and experimental benchmarks and demonstrate its effectiveness on several language tasks
 - Integrate the model into a larger natural language processing (NLP) application, MALENA (Machine Learning ESG Analyst), demonstrating its usefulness for real-world language processing tasks
 - Conduct research to improve the model's fairness, explainability, or adversarial robustness, ensuring that the model is transparent and fair in its decision-making process
 - Collaborate with stakeholders to understand their requirements and designed interactive dashboards for better insight communication
- **Georgetown University** Washington, D.C.
Teaching Assistant / Bootcamp Manager Aug. 2021 – Aug. 2022
 - Served as a graduate teaching assistant for ANLY-503 (Advanced Data Visualization) and ANLY-560 (Time Series), providing weekly office hours and grading assignments for a group of over 30 students
 - Facilitated course materials, managed the course Slack channel, and organized the course GitHub organization
- **K2L Canberra** Canberra, Australia
Product Data Analyst July 2019 – June 2021
 - Utilized Python and SQL to track and analyze product data, resulting in a 15% increase in recommendation accuracy
 - Created data visualizations with MySQL and R for product key performance indicators (KPIs), reducing manual reporting time by 3 hours per week
 - Improved user experience (UX) measures by 20% through increased user feedback collection and frequent iteration based on customer needs
 - Worked with the engineering team to launch an internal kanban tool to improve the work-from-home experience
 - Successfully launched 6 products (including websites, mobile apps, and web apps) for clients in 2 years, resulting in a 65% revenue increase
- **K2L** Canberra, Australia
Co-founder/Data Analyst Feb. 2019 – June 2019
 - Successfully led a team of 12 in developing an online Q&A community, which merged the concepts of StackOverflow and TikTok. The community grew to 1,000 users in just 3 months
 - Conducted market competition analysis using scraped data to inform the initial product planning process
 - Analyzed business goals, schedules, and budgeting during the early stages of development and created strategies to align with these objectives
 - Developed functional prototypes that improved communication efficiency by 30% for clients

PROJECTS

- **What Ingredients Are You Tasting In Authentic Japanese Flavors?** A comprehensive interactive visualization project on Japanese cuisine with D3, plotly and leaflet. [Website](#)
- **Basketball Analytics and Beyond** A project on various basketball related topics, both on-court and off-court. [Website](#)
- **No Pie Newsletter** A newsletter curating the latest articles, packages, tools and podcasts about data visualization. [Archive](#)
- **xG Visualization Pipeline** An automation R script to parse and clean raw data from soccer games. [Tweet](#), [archive](#), [repository](#)
- **tarantino** An R package that generates color palettes inspired by Quentin Tarantino's movies for visualization. [R-Weekly](#), [repository](#)
- **@canberramapbot** A Twitter bot utilizes Mapbox and Twitter APIs to post bird's-eye view over Canberra. [Repository](#), [Twitter](#)
- **sentRy** A DevOps monitoring tool that sends Django error logs to subscribers' Telegram account. Reduced the total amount of notifications by 40% via aggregation and trimming redundant information. [Blog](#), [repository](#)