JIE NIU (牛偈)

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🎓 EDUCATION

Queen's University at Kingston   2017 – 2022

Bachelor of Computing (Hon.) specialize in Computer Science and Mathematics

🏛 ACADEMIA EXPERIENCE

St. Lawrence College, Kingston, ON   Jan. 2023 – Apr. 2023

Adjunct Instructor

COMP 53 – Intermediate Database

- Teach beginning to intermediate SQL concepts for database design and querying;
- Facilitate class discussions in-person and online hybrid;
- Expose students to advanced database topics.

Smith School of Business, Queen's University   Jan. 2022 – Present

Research Assistant

Deliver technical components to support research projects.

Past and Current Projects:

- Data Mining on Bloomberg Terminal together with financial databases (WRDS). Write automated scripts to extract and update current corporate credit ratings and storage in database. Tools used: R, PostgreSQL.
Supervisor: *Prof.* Evan Jo

- Process and analyze research data studying retirement, longevity, and annuity price. Implement virtual file system for file storage in database. Tools used: Linux HPC.
Supervisor: *Prof.* Evan Jo

- Web scraping to extract financial data and comment on Yahoo Finance. Build time series on scraped data and perform sentiment analysis on user conversations. Tools used: R.
Supervisor: *Prof.* Jingyu Zhang

Smith School of Business, Queen's University   Jan. 2022 – Present

Teaching Assistant

- COMM 420 (Financial Technology and Innovation, Winter 2022)
Grade assignments; troubleshoot and hold workshop for R programming in quantitative trading.
Supervisor: *Prof.* Evan Jo

- COMM 161 (Intro. to Mathematical Analysis, Fall 2022)
Head TA - oversee grading process; prepare weekly tutorials; maintain student records.
Supervisor: *Prof.* Matthew Thompson

- MGMT 921 (Capital Markets, Theory and Empirics, Winter 2022 & 2023)
Hold workshops and tutorials on R, Python, PostgreSQL and financial database (WRDS).
Supervisor: *Prof.* Evan Jo

- COMM 493 (Analytics & AI for Business, Winter 2023)
Grade business case and coding assignments; create technical documents for students.
Supervisor: *Prof.* Shaun Cahill

💼 Professional Experience

Smith School of Business, Queen's University   Apr. 2021 – Present
Administrative Assistant

Support School of Business Professors. Work in PeopleSoft, maintain course websites through D2L, prepare expense claims, manage supplies, and other duties as required.

Kingston Online Services, Kingston, ON   Jan. 2021 – Apr. 2021
Technical Support Representitive

Troubleshoot and assist customers with their internet connection. Responsible for configuring and preparing hardware for customers, and responding to support tickets in a help desk.

👤 Personal Projects

- LinkedIn data harvesting
- SEC EDGAR archiving and analysis
- Front- and backend design of a homomorphic encryption algorithm

⚙ Skills

- Writing: LaTeX
- Programming Languages: R == SQL > Python == C > Java
- Platform: Mac; Linux; HPC Clusters (*High Performance Computing*)
- Development: Containers (Docker, Podman, Singularity), Web Development (Django, Flask, R Shiny)

♡ Honors and Awards

Queen's University Excellence Scholarship   Sep. 2017
Queen's University General Bursary   Apr. 2020

ⓘ Miscellaneous

- Notable undergraduate courses: *Logic for Computer Science, Calculus III, Graph Theory*
- Languages: English (Professional), Mandarin (Native)
- Citizenship: Chinese