Zhuoran (Lucy) Sun

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EDUCATION

Carnegie Mellon University

Pittsburgh, PA

Master of Computational Data Science (Analytics Track)

Expected: Dec 2025

Cumulative GPA: **4.08/4.0**

Relevant Courses: Machine Learning for Signal Processing, Machine Learning with Large Datasets

Emory University Atlanta, GA

Bachelor of Business Administration, Information Systems & Operations Management

May 2021

Double Major: Mathematics and Computer Science Joint Major

Cumulative GPA: **3.95/4.0** (High Distinction, ISOM Distinction Award, Beta Gamma Sigma)

Relevant Courses: Optimization, Numerical Analysis, Database Systems, Machine Learning, Data Mining

Coursera: Deep Learning Specialization, Machine Learning, Financial Engineering and Risk Management

FINRA: SIE, Series 7 & 63

TECHNICAL SKILLS

Programming Languages: Python, SQL, R, Java, C, Latex

Frameworks & Libraries: PyTorch, Sklearn, Spring Boot, Django, PySpark

Tools: Git, Snowflake Database, Azure, AWS, Tableau

Specialized Skills: Time-series Analysis, Machine learning, Deep Learning, Financial Risk Management

PROJECTS

Post-Trade Reporting Pipeline, Truist Securities

Atlanta, GA

Quantitative Research Analyst

July 2021 – June 2023

- <u>Automated</u> fixed income trading desks' daily profit and risk reporting process in python and <u>Snowflake</u> database
- Managed version control using <u>GitLab</u> and developed automated pipelines for periodic backups of models and reports
- Reported to senior management on credit trading and municipal trading businesses with <u>Tableau</u> Dashboards
- Optimized SQL queries by 70% efficiency when migrating data from sql server to Snowflake and updating processes
- Managed reconciliation between reporting systems and databases to ensure correct data flow of trading activities

E-commerce Database Analysis, Emory University

Atlanta, GA

Research Assistant

Aug. 2019 - July 2020

- Analyzed data from B2W, a leading e-commerce platform in Latin America, mentored by Professor Nosayba El-Sayed
- Probed in customer behavior by analyzing and predicting 40m+ cart status to improve recommendation algorithms
- Performed time-series, random forest and DBSCAN on attributes: time, price and sku ids to predict database volume
- Paper accepted: OLTP In Real Life: A Large-scale Study of Database Behavior in Modern Online Retail at MASCOTS 2021

Sales System, The Emory Wheel

Atlanta, GA

E-system Developer & Salesperson

Sept. 2017 - June 2020

- Developed an online sales system, using <u>Diango</u>, a python website structure, for management of the business team
- Regulated communication with 100+ clients, generated \$1000+ sales revenue each semester to support management

WORK EXPERIENCE

Truist Securities Atlanta, GA

Quantitative Research Associate

June 2023 – June 2024

- Performed <u>statistical and time-series analysis</u> on trading signals from RFQ for electronic trading on 3+yrs data
- Developed, managed and distributed Python package for data manipulations in Snowflake database for research
- Built RUNZ, an <u>event-driven</u> bond price change listener, with Bloomberg Data API and <u>Spring Boot</u> framework
- Created user-defined functions and procedures for bond pricing models in Snowflake database with SQL and Java

Business-Intelligence of Oriental Nations Corporation

Daging, China

Data Analyst

Jun. 2019 - Aug. 2019

- Cleaned and maintained integrity of project data in Hadoop, including data storage, manipulation, and analysis
- Provided data support to product managers for a business-intelligent report designed for city's government

LEADERSHIP & COMMUNITY INVOLVEMENT

Stream Chinese Musical Ensemble. Founder & Performer

Ian. 2018 - May 2021

- Founded a musical ensemble, recruited more than 10 people, performed Guzheng, managed rehearsals and recitals
- Organized the team to perform in International Festival and Chinese showcases with 500+ audience each performance