

Zhuoran (Lucy) Sun

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EDUCATION

Carnegie Mellon University

Master of Computational Data Science (Analytics Track)

GPA: **4.08/4.0**; Courses: Machine Learning for Signal Processing, Machine Learning for Large Datasets, Cloud Computing

Pittsburgh, PA

Expected: Dec 2025

Emory University

Bachelor of Business Administration, Information Systems & Operations Management

Double Major: Mathematics and Computer Science Joint Major

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

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

Atlanta, GA

May 2021

Coursera: Deep Learning Specialization, Financial Engineering and Risk Management **FINRA:** Series 7 & 63

WORK EXPERIENCE

Truist Securities

Quantitative Research Analyst/Associate

Post-Trade Analysis and Reporting Pipeline

- Automated the daily profit and risk reporting process for credit trading desks, developing interactive tools for senior management. Expanded the solution to cover all fixed-income and loan-trading businesses, reducing report generation time by 50% while ensuring uninterrupted reporting and high-quality data analytics to support business decisions
- Enhanced query performance post-migration of SQL server to Snowflake, achieving a 15% reduction in execution time
- Built reconciliation processes of reporting systems and databases among traders, middle-office, and accounting teams

Trading Strategy and Trader Support

- Led a proof-of-concept analysis for an investment-grade bond trading strategy, utilizing statistical and time-series analysis on over 3+ years of RFQ data; delivered to traders as part of the electronic trading strategy development
- Built RUNZ, an event-driven bond price listener using SpringBoot to capture Bloomberg quote messages, enabling price change alerts and pre and post trading time-series analysis for high-yield bonds

Team Support

- Developed and distributed Python API packages across trading and back office teams to integrate with main pricing systems across all derivative trading businesses, ensuring stable connectivity, result formatting, and compliance with company-wide security updates, enabling easier derivative pricing analytics for desk-support analysts
- Managed documentation and version controls and developed pipelines backing up all reporting processes in the team
- Took the initiative to optimize the annual trading volume and balance sheet analysis for all trading businesses and reduced query generation time from 1 hour to 15 minutes for each trading desk

Emory Student Digital Life

Student Technology Support

- Provided technical support for hardware and software issues on student-owned devices, including configuring WiFi connections, troubleshooting operating systems, removing viruses, and repairing hardware

Atlanta, GA

Aug. 2019 – May 2021

PROJECTS

E-commerce Database Analysis, Emory University

Research Assistant

- Analyzed 40M+ cart statuses on the largest Latin American e-commerce platform to improve database efficiency by applying time-series analysis, random forest, and DBSCAN, achieving a 91% ROC for checked-out carts
- Paper accepted: *OLTP In Real Life: A Large-scale Study of Database Behavior in Modern Online Retail* at MASCOTS 2021

Atlanta, GA

Aug. 2019 – July 2020

Sales System, The Emory Wheel

E-system Developer & Salesperson

- Migrated sales data from Google Sheets to a Django-based online sales system, enabling report generation, analytics, visualization, and commission calculations, saving the sales manager 50% of time on analytics and organization
- Regulated communication with 100+ clients, generated \$1000+ sales revenue each semester

Atlanta, GA

Sept. 2017 – June 2020

LEADERSHIP & COMMUNITY INVOLVEMENT

Stream Chinese Musical Ensemble, Founder & Performer

- 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

Jan. 2018 – May 2021