Elisa Tianqi Duan

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EDUCATION

Northwestern University **Evanston, IL**
Bachelor of Science, Data Science & Industrial Engineering and Management Sciences Anticipated Graduation: June 2027
Relevant Coursework: Data Management and Information Processing, Python Programming, Probability & Statistics, Linear Algebra, Optimization, Stochastic Modeling, Engineering Analysis, Macroeconomics, Microeconomics

PROFESSIONAL EXPERIENCE

Data Science Intern, IDX Exchange | Remote September 2025 – December 2025
- Collaborated with a team to conduct exploratory data analysis (EDA) on real estate market data to support predictive modeling of housing prices in Southern California
- Developed and evaluated a LightGBM model to predict property closing prices using California Regional Multiple Listing Service (CRMLS) data, comparing performance across ML models using R^2, MAPE, MdAPE

Teaching Assistant for CS 217: Data Management and Information Processing | Northwestern University March 2025 – Present
- Mentored 100+ students in SQL for data management using SQLite Studio, guiding them through creating relational databases, importing data, and writing queries, supporting students to work independently with real-world data
- Delivered 1:1 code walkthroughs to help students strengthen SQL proficiency, debug code, and grasp key query concepts

Data Science Intern, Metropolitan Chicago Data-science Corps | Chicago, Illinois June 2025 – August 2025
- Designed and implemented a relational SQL database (Supabase.io) and a responsive HTML/CSS/JavaScript web interface (GitHub Pages) to organize, store, and query large volumes of seismic records, improving data retrieval efficiency
- Partnered with Born Physical, Studied Digitally Consortium to streamline pipeline by digitizing historic microfilm seismograms using PowerScan200 and Label Studio, extracting and annotating metadata to support long-term seismic research accessibility

Operations & Finance Intern, MATTER Health| Chicago, Illinois June 2025 – August 2025
- Automated data workflows using Google Apps Script and built interactive Looker Studio dashboards to track room bookings and visitor activity, enabling the team with real-time space utilization insights to drive operational decisions
- Consolidated QuickBooks P&L data in Excel for audit compliance reporting and streamlined a Google Sheets commission tracker to improve earnings accuracy and enhance visibility in compensation reporting

Entrepreneurship Administrative Assistant, Kellogg School of Management September 2025 – Present
- Managed alumni database records, improving data accuracy and accessibility for research and entrepreneurship efforts
- Organized and processed reimbursement files for MBA students, supporting startup and venture-related operations

Business Operations Attendant, Norris Center |Northwestern University September 2023 – June 2025
- Utilized Excel to process 100+ accounting journals for Norris Center events and Barnes & Nobles bookstore invoicing, boosting payment tracking accuracy and streamlining financial reporting
- Managed documentation for $4 million in annual invoices through Northwestern's financial system and databases (EMS, Mazévo, Smartsheet), ensuring audit-ready recordkeeping

PROJECTS

Adidas Sales Analysis | Python September 2025 – December 2025
- Analyzed Adidas sales data to understand how data-driven decision making (DDDM) supports retail strategy, with a focus on profitability, regional performance, and product demand
- Cleaned, aggregated, and visualized sales data using pandas, NumPy, matplotlib, and seaborn, creating heatmaps and bar charts to compare performance across sales methods, regions, and product categories

Chicago Crime Data Analysis | Python January 2025 – March 2025
- Analyzed the *Violence Reduction - Victim Demographics - Aggregated* dataset using Python to identify and quantify disparities in violent crime victimization across race, age, and sex
- Cleaned, visualized data using pandas, matplotlib, and seaborn to identify groups disproportionately affected by violent crime

LEADERSHIP EXPERIENCE

Chief Financial Officer, Locket Cybersecurity| Evanston, Illinois September 2024 – Present
- Partnered with public relations to promote brand visibility and awareness across the Evanston and Chicagoland communities
- Led a team in conducting cybersecurity audits with organizations, recommending improvements to strengthen safety practices

SKILLS

- **Programming:** SQL, Python (Pandas, NumPy, Matplotlib/Seaborn), R, MATLAB, Racket, AMPL, HTML
- **Platforms:** Google Apps Script, GitHub, Supabase.io, MongoDB, Microsoft Office, Smartsheet, Looker Studio, HubSpot
- **Analytical & Business Skills:** Data Analysis, Business Analytics, Process Optimization, Project Management