Tongrui (Neil) ZHANG

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EDUCATION

Georgetown University — Washington, D.C., USA

Master of Science in Data Science and Analytics, Graduate School of Arts and Science — 08/2024-05/2026

- GPA: 4.0/4.0
- Courses: Prob Modeling/Stat Computing; Data Science and Analytics; Database Systems and SQL;

Shanghai University of Finance and Economics (SUFE) — Shanghai, China

Bachelor of Engineering in Data Science and Big Data Technology, School of Information Management and Engineering — 09/2020-07/2024

- GPA: 3.35/4.0 | WES GPA: 3.38/4.0
- Academic Projects: Sentiment Analysis and Recognition (*Python [DL], 03/2023-06/2023*); Machine Learning Analysis of Industrial Steam Data (*Python [ML], 09/2022-12/2022*); Crawler and Visualization for JD Health Food Products (*Python, 05/2022-06/2022*); Design and Establishment of a Douban-like Information Database (*Oracle, 09/2021-12/2021*);

SKILLS SUMMARY

- **Tools/Software:** Python (NumPy, Pandas, PyTorch, Matplotlib, Seaborn, SciPy, Scikit-learn, NLTK), R (tidyverse, knitr, ggplot2), C++, Stata, SPSS, Tableau, Power BI, SQL Server, MySQL, MATLAB, CSS, SAP, Spotfire, Arena, Microsoft Excel (Vlookup, Pivot Table), Microsoft Access, Java, JavaScript
- **Data Skills:** Machine Learning (Linear Regression, Naive Bayes, Decision Trees, kNN, K-Means, Association Rules, Collaborative Filtering, Random Forests, Clustering), Deep Learning (Neural Networks, Huggingface Transformers, PyTorch), Database Design and Deployment, HTML Website Building, Image Data Processing, Data Cleaning, Exploratory Data analysis, Web Scraping(BeautifulSoup, Scrapy, or Selenium), Natural Language Processing(BERT, GPT, Word2Vec, GloVe), A/B Testing, Mathematics and Statistics (Probability Theory, Mathematical Statistics, Stochastic Processes, Hypothesis Testing, Bayesian Statistics, Time Series Analysis, Markov Chains)
- **Languages:** Chinese (Native), and English (Proficient)

INTERNSHIP EXPERIENCES

Dewu (Poizon) — Shanghai, China

Marketing Data Analytics Intern — 02/2024-05/2024

- Conducted preliminary data insights based on historical data for major promotional events like 38 and 520 sales event, drafted the marketing calendar and supported its execution, and conducted data reviews after the events
- Conducted weekly and quarterly reviews for various product categories in Crazy Weekend channels, timely adjusted and optimized channel strategy plans including monitoring hot-selling items, analyzing their growth attribution and summarizing universal strategies
- Planned and designed resources for major promotions and commercial placements with brands, including setting up A/B tests for different users, products, etc., to optimize resource slot efficiency

NielsenIQ — Shanghai, China

Data Analytics Intern — 06/2023-11/2023

- Drafted e-commerce data analysis reports for clients encompassing industry trends, new product sales performance, competitive products and repurchase rates, conducted strategy analysis of competitive products, and proposed feasible development strategies for clients
- Worked on the functional testing and result verification for the e-commerce data dashboard of the company, performed the analysis with competitive products, suggested optimization strategies, identified 180+ bugs, as well as recommended suggestions for improvements
- Sifted through potential KOLs based on factors such as average order value and consumer profiles in a pool of 10,000+ KOLs, liaised with 300+ KOLs, collaborated with 20+ for live broadcasting, provided operational support, and conducted post-broadcast data analysis

Siemens — Shanghai, China

Business Administration Intern — 05/2023-08/2023

- Updated inventory and order data utilizing internal information platforms of Siemens, organized urgent orders in the Customer Care Center
- Performed data maintenance on SAP and SPR systems including GR, inventory information verification, maintenance of monthly discount policies, confirmation of material location, and unlock of material
- Reviewed the return and exchange requests from the distributors, designed and tested automated solutions for this verification function

PerkinElmer (now "**Revvity**" since 05/2023) — Shanghai, China

Systems Delivery Intern — 02/2023-05/2023

- Developed SQL Server functionalities for a medical research platform for a hospital in Shanghai including writing stored procedures for patient examination records and configuring SQL Server agent for automated tasks, created new requirement views for departmental examinations, implemented data masking of patient information, and verified the frequency of patient examinations
- Implemented the functional integration of 'employee operational performance' between the database and Spotfire for an information management platform, authored the construction and upgrade guidance, and achieved the front-end data visualization display
- Assisted in front-end and back-end deployment for the data platform including testing the functioning of front-end interface features

PROJECT EXPERIENCES

DataDive By DSAN & DataKind DC — DC, USA

Not Side Effect Project — 09/2024

- Retrieved data from multiple APIs (OpenFDA, News API, Reddit API), refined and organized the data into a comprehensive database that integrates pharmaceutical information, social media feedback, and news content.
- Established a dictionary of drug side effect keywords, applied NLP techniques for sentiment analysis and social media comment matching to identify and rank user-reported drug reactions, showcasing high-frequency side effects and relevant key comments.
- Developed an interactive demo app for real-time querying of drug safety signals, enabling users to explore drug reactions and gain insights

SUFE Qiming Cup Case Study Business Competition — Shanghai, China

Brand Development Strategic Planning — 10/2021-11/2021

- Interpreted the development trajectories of Yifeng Pharmacy, developed a Selenium-based Python pipeline to scrap 30,000+ consumer comments of the brands from various social media platforms, and devised appropriate strategies for development and market expansion
- Analyzed the competitiveness of the brands from perspectives such as historical context, customer orientation and retail innovation, investigated the development of new media platforms and the current state of international industry, employed Tableau for data visualization, and produced PPT to showcase the findings