# Chenyuan Zhang

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#### **SUMMARY**

Data Analyst skilled in Python, R, ETL, and data visualization. Achieved improvements such as a 25% boost in GMV estimation accuracy and a 40% increase in report delivery efficiency through multiple internship projects. Adept at transforming complex data into actionable insights and collaborating with cross-functional teams to drive data-driven digital solutions.

#### **EDUCATION**

Northeastern University Sep 2023 - May 2025

Master of Science, Data Analytics Engineering (GPA: 4.0/4.0)

• Coursework: Data Mining, Deterministic Operation Research, Database Management

University of Connecticut Aug 2018 - Jun 2022

Bachelor of Science, Applied Mathematics with Minor in Statistics

#### WORK EXPERIENCE

### BigOne Lab | Data Analyst Intern

Oct 2022 - Feb 2023

- Executed multi-platform brand performance analysis by processing scraped data from major marketplaces, producing 5 Excel-based brand performance reports that drove strategic client decisions.
- Collaborated with the research team to build an ETL workflow for managing millions of product records, incorporating anomaly detection models and deploying 2 monitoring dashboards that improved GMV estimation accuracy by 25%.
- Conducted a customized competitive analysis for a major brand, evaluating key dimensions such as brand positioning, sales channels, and trending products to deliver comprehensive market insights.
- Leveraged AWS and PySpark to implement an automated system for generating 3 periodic analytical reports, integrating Python libraries for data processing and improving report delivery efficiency by 40%.

CZ AI | Data Scientist Intern Mar 2023 - Jun 2023

- Developed a KPI system by engaging with industry leaders and analyzing market trends, producing 18+ actionable reports that informed strategic decisions.
- Preprocessed and integrated 740,000 textual data points across 5 categories using NLP techniques, establishing an ETL pipeline for multi-source data integration and format standardization before storing the data in MySQL.
- Optimized BI processes by designing 9 automated analytics templates with GPT API integration and deploying 3 interactive dashboards, enhancing decision-making efficiency by 70%.

### **BUW Human Hair Factory Store** | Data Analyst Intern

May 2021 - Jul 2021

- Streamlined e-commerce analysis by reengineering KPI structures using the AARRR framework and launching 3 Tableau dashboards that covered 30% of routine data queries.
- Led conversion rate optimization by analyzing user flows, identifying critical 'add-to-cart' drop-off points, and proposing detail-page enhancements validated via A/B testing.
- Generated weekly Google Ads reports on ad spend and traffic trends, providing data-driven insights to the C-suite and driving measurable gains in overall ROI.

# ACADEMIC RESEARCH

# Medicine Allocation strategy for Opioid Epidemic in Massachusetts

Oct 2024 - Apr 2025

Decision Analytics Lab

- Designed models for optimal resource allocation to lower fatal overdoses under budget and accessibility constraints
- Created AI-powered research assistant tool, improving domain knowledge retrieval and research efficiency by 300%
- Integrated multiple datasets (EMS, census, public health) to analyze seasonality, demographics, and administration patterns influencing overdose outcomes and intervention opportunities
- Geocoded incident data to conduct geospatial analysis identifying overdose hotspots and high-risk locations

#### **AB Test Integrated Boston Attractions site**

Sep 2023 - Dec 2023

- Executed end-to-end database design for Boston Attractions Website, aimed at tourists, featuring a list of attractions and an interactive dashboard for data display and insights.
- Implemented the database using MongoDB, and integrated it with a web application using Flask.
- Led the A/B testing workflow, from defining success metrics and structuring test periods to validating hypotheses, refining user interaction through data-driven insights.

# **SKILLS**

- Programming Languages: SQL, R, SAS, Python, PySpark, SciPy, NumPy, Pandas, SciKit-Learn
- Analytical Tools: AB Test, Excel, Tableau, ETL, Git, GitHub, AWS, Prompt Engineering, Machine Learning
- Big Data & Cloud: Hadoop, Spark, Scala, C++, Microsoft Azure, Google Cloud, Cloud Computing, Big-data platforms