Serena(Luyao) Wu

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Education

Master of Computer and Information Technology	Philadelphia, PA
University of Pennsylvania, School of Engineering and Applied Science	*Aug. 2024 – May. 2026*

Cumulative GPA: 3.90/4.00; GRE: 332 (Q 170) /340

Courses: Big Data Analytics, Applied Machine Learning, Data Structures & Software Design, Algorithms & Computation, Databases & Information Systems, Artificial Intelligence

Bachelor of Science in Direct and Interactive Marketing	New York, NY
State University of New York	*Aug. 2016 – May. 2020*

Skills

Programming Languages: Python (pandas, NumPy, scikit-learn, TensorFlow, PyTorch), SQL, R, Java, C/C++
Machine Learning & AI: Supervised & Unsupervised Learning, Linear Regression, Clustering (K-Means, PCA)
Statistical Methods: A/B Testing, RFM Modeling, Time Series Analysis, Cohort Analysis, Hypothesis Testing
Data Engineering & Tools: SQL, Spark, MongoDB, AWS, Docker, Git/GitHub
Visualization & BI: Tableau, Power BI, Excel (PivotTables, VLOOKUP, dashboards)

Work Experience

Data Analyst – Customer Targeting Strategy	*Shanghai, China*
Baozun Inc. (Nasdaq: BZUN) – Project with Nivea	*Feb. 2022 – Feb. 2023*

- **Customer Segmentation:** Developed data-driven targeting strategies by analyzing e-commerce user profile data to identify high-potential customer segments for targeted brand.
- **Advanced Segmentation Techniques:** Implemented advanced segmentation techniques using K-Means Clustering and Random Forest to categorize users based on purchasing behavior, demographics, and browsing patterns.
- **Predictive Modeling:** Predicted conversion likelihood through Linear Regression and RFM (Recency, Frequency, Monetary) modeling, optimizing customer lifetime value estimation.
- **A/B Testing:** Designed and executed A/B tests, leading to a 12.5% improvement in Return on Advertiser Spend (ROAS) over the platform's baseline recommendations.
- **Data Visualization:** Developed interactive dashboards using Power BI and leveraged Python for advanced data visualization, trend analysis, and actionable insights.
- **Business Impact:** Validated findings with a full-scale launch, resulting in a 14.3% year-over-year increase in ad campaign effectiveness through refined customer targeting.

Data Analyst – Omnichannel Market Expansion	*Shanghai, China*
Baozun Inc. (Nasdaq: BZUN) – Project with Stanley Black & Decker	*Jan. 2021 – Feb. 2022*

- **Strategic Market Intelligence:** Supported DeWalt's China expansion through data-driven analysis using the 4P marketing mix, enabling optimal benchmarking, competitive pricing, and omnichannel marketing strategy refinement.
- **Data Engineering:** Cleaned, processed, and engineered features from 3+ years of Taobao transaction data across 13 product categories using Python (pandas, NumPy) and Excel, delivering insights on market trends and consumer behavior.
- **ETL and Data Warehouse:** Co-designed a centralized data warehouse for real-time data access and automated reporting, integrating high-volume data using SQL and structured file systems.
- **BI Reporting:** Automated performance dashboards to track campaign metrics, price positioning, and category growth using PivotTables, Power BI, and SQL, improving decision speed.
- **Predictive Modeling:** Developed and implemented predictive models, including linear regression, to evaluate promotion lift, seasonal trends, and media performance.
- **Operational Excellence:** Drove a 13.5% revenue increase during sales events (618 and Double 11) by collaborating with cross-functional teams to optimize channel mix and promotional timing.

ACTIVITIES

Wharton Global Youth Program Application Reviewer: Evaluated 700+ applications for competitive data science programs; refined judgment in identifying technical potential and academic fit.

SUNY Library Lab Monitor: Helped students resolve software issues; enhanced skill in translating complex technical issues into clear, accessible explanations.