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#### **EDUCATION**

# Master of Science in Business Analytics, Rady School of Management

12/2025

University of California, San Diego, CA

Courses: Business Analytics, Web Mining and Recommender Sys, Scalable Analytics, SQL and ETL

### Bachelor of Science in Computer Science

06/2024

Union College, Schenectady, NY

- Courses: Artificial Intelligence, Large-scale Software Design, Data Visualization, Timing Big Data, Data Structure.
- 2020-2021 Union College Dean's List.

### **EXPERIENCE**

Business Analytics, Strategy Department of Tencent, Remote

12/2023 - 01/2024

Supported the Strategy Department by conducting in-depth market research on China's mobile advertising landscape to inform strategic planning

- Conducted market research on mobile advertising trends, uncovering insights to drive strategic planning.
- Evaluated leading platforms (Branch, Adjust, AppsFlyer) by benchmarking attribution capabilities, contributing to data-informed platform selection.
- Forecasted market share trends through data collection and analysis, supporting future business strategies.

#### **PROJECTS**

Student Data Analysis, Thermo Fisher Scientific Sponsored Capstone Project

03/2025 - 06/2025

- Built a predictive model to identify potential overbuy scenarios in real-world operational contexts.
- Developed feature engineering pipelines and evaluated models using Python and relevant libraries.
- Delivered final presentation and technical deliverables to company stakeholders.

## Leader, Pentathlon: Next Product to Buy Modeling

03/2025 - 03/2025

- Directed a team to create and tune multiple ML models (Random Forest, Neural Network, XGBoost, Logistic Regression) to personalize promotional email messaging, maximizing incremental revenue.
- Leveraged a Random Forest model to predict customer purchase probabilities and expected order sizes, generating approximately €1.3M in profit, a 64% improvement over random messaging strategies.
- Presented a comprehensive analysis and strategic recommendations, leading to the adoption of a new email allocation policy.

### Machine Learning Engineer, Uplift & Propensity Modeling for Creative Gaming

01/2025 - 02/2025

- Built and fine-tuned multiple ML models to optimize customer targeting for marketing campaigns
- Forecasted conversion rates, achieving the highest AUC of 0.829 and outperforming baseline metrics in incremental revenue and ROI.
- Led comprehensive A/B testing and randomized control trials (RCTs), presenting data-driven insights shaped strategic marketing decisions.

### **Developer**, Book Recommendation System

10/2024 - 11/2024

- Developed a dual-task recommender system addressing both rating prediction and read prediction using Python and advanced ML techniques based on a 200k+ dataset.
- Optimized an SVD-based model (using the Surprise library and Optuna for hyperparameter tuning) to achieve a 20% improvement over baseline with an MSE of 1.46.
- Designed a popularity-based classifier for read prediction, reached 76.6% accuracy on balanced test data, ranking in the top quartile on the course leaderboard.

## SPECIALIZED SKILLS

- Programming Languages: Python, Java, JavaScript, SQL, R, HTML.
- Data Science & ML: PySpark, Scikit-learn, XGBoost, Pandas, BERT, Optuna
- Tools & Technologies: Tableau, Power BI, Vue3, Git.