Xidan Kou

kouxidan@bu.edu | 380-2137-067 | www.linkedin.com/in/xidankou/

EDUCATION

Boston University. **Boston, USA**

Master of Science, Major in Applied Business Analytics, STEM Major *Sep 2022– Jul 2023 (expected)*

- Research Assistant: Review extensive literature on citation classification techniques (Machine Learning and Deep Learning); cleaned and transformed citation data on BU SCC (Shared Computing Cluster).

The Ohio State University **Columbus, USA**

Bachelor of Arts and Sciences, Major in Data Analytics, STEM Major *Aug 2018– May 2022*

- President of Venus Model Club: Established first model club within university and recruited more than 300 members; carried out weekly physique training; released shooting videos on the WeChat official account, gaining over 100 followers.
- Awards: Dean's List (GPA >3.8) four semesters; graduated with Cum Laude Honor.

EXPERIENCE

Shenzhen Defu Investment Advisory CO., LTD **Urumqi, China**

Consulting, Data Analyst - Intern *May 2021 – Aug 2021*

- Disclosed a 25% mismatch between commercial tenants and customer segmentation by collecting and investigating 300+ questionnaires on customers' brand preferences and researching on shopping mall with SWOT analysis.
- Gauged brand preferences and forecasted customers' spending habits with 83% prediction accuracy by manipulating data to conduct **Supervised Machine Learning** models (**Logistic Regression**) in **Python** (Pandas, NumPy, Sklearn).
- Increased customer flow by 10 within one week after implementing the proposed suggestions on brand selection (13 brands) and feasible marketing strategies; Visualized analysis results by Tableau Dashboards and presented to non-technicians.

Shenzhen Chengherun Culture Communication CO., LTD **Shenzhen, China**

Marketing Data Analyst - Intern *May 2020 – Aug 2020*

- Detected a 10% space of improvement with advertising content and identified the evaluation matrix of browsing data through **Exploratory Data Analysis** in R (ggplot, dplyr) of online purchasing platform's browsing history and clicking data.
- Produced insightful suggestions to promote products and presented results to Marketing Department with **Tableau** Dashboards.
- Increased followers by 5% within 10 days on social shopping platforms (WeChat and Little Red Book) to boost sales by collaborating with marketing teams to refine and publish quality tweets.

PROJECTS

Recommendations for Donation Increase to The OSU Office of Advancement *Jan 2022 – May 2022*

Capstone Project – Served as Data Scientist for The OSU Office of Advancement

- Filtered top 20 contributors for donations by conducting variable selection using Supervised Machine Learning models (**Lasso** and **Random Forest**) in R with 3 large datasets (400+ columns and 1.3 million+ rows) on donors' giving history.
- Achieved 68% precision on the classification model (**K-nearest neighbors**) to identify the traits of potential donors.
- Detected 48% of donors have the potential to grow the donations by $4000 through predicting the amount of donations using Supervised Machine Learning models (**GAMs**, **Smoothing Spline**) in R (gam, stats, npreg).
- Led a group of 5 to converted technical results to visualizations deploying Adobe Illustrator and Tableau Dashboards; presented findings and proposed insightful suggestions to non-technician; reported to the stakeholder twice per week.

Online Bookstore *Bits & Books* Database *Sep 2021 – Dec 2021*

- Created the **relational database** for bookstore by creating ER diagrams, relationships, and entities between keys.
- Performed KPI matrix for Bits & Books online bookstore to evaluate sales and revenue conditions by producing **SQL** queries (AVE, order by, group by, view) between tables considering functional dependencies, primary and foreign keys.

SKILLS

- **Tools:** R Studio (r markdown, glmnet, randomForest), Python (SciKit-Learn, SciPy, Keras, Matplotlib, PyTorch), SQL, Tableau, Power BI, MS Excel (Solver, VLOOKUP, Decision Tree, Pivot), Java, Adobe Illustrator, Adobe Photoshop, Arc GIS, QGIS, C
- **Statistics:** A/B testing, Hypothesis testing, Probability, Optimization, Time-series, Prediction, Forecasting, Sensitivity analysis
- **Machine Learning:** Classification (DT, RF, KNN, SVM, Logistic Regression), Linear Regression, Clustering (K-means, PCA)