

HOFFMANN ZHU

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EDUCATION

DUKE UNIVERSITY, The Fuqua School of Business Durham, NC
Master of Science in Business Analytics (MQM) May 2024
3.7 GPA, Merit Scholarship Recipient, Selected Admissions Ambassador

FEI TIAN COLLEGE Cuddebackville, NY
Bachelor of Music, major in Violin Performance May 2020

WORK EXPERIENCE

DUKE UNIVERSITY CAPSTONE FOR LIGHTFORCE ORTHODONTICS Durham, NC
Business Data Analyst Mar. 2024 – May 2024

- Uncovered key insights that informed strategic decisions on orthodontist segments by cleaning and validating 97,000+ rows of customer account data using SQL and Python
- Built interactive Tableau dashboards displaying key metrics that supported stakeholders in determining concrete marketing strategies to identify at risk customers and boost retention
- Decreased marketing expenses by 7% by building and implementing a BG/NBD model to pinpoint and engage high value customers, enhancing marketing ROI and customer interaction
- Streamlined communication with non-technical stakeholders by creating comprehensive documentation on data processes, including data cleaning procedures and model implementation
- Collaborated with cross-functional teams in marketing and sales to implement recommended retention strategies and track metrics with Tableau dashboards
- Developed and executed comprehensive A/B testing strategy to measure the impact of marketing strategies on user retention, increasing customer engagement by 5%

SHEN YUN PERFORMING ARTS Cuddebackville, NY
US based company with eight troupes touring worldwide May 2020 – May 2023
Senior Project Manager (Concertmaster)

- Led the development and implementation of an innovative rehearsal schedule that increased efficiency by 25%, reducing labor hours and improving performance quality
- Headed Shen Yun-North American Company Orchestra in 121 performances per year; navigating challenges and performing solos during live performances, ensuring a seamless execution
- Mentored and coached 10 musicians annually on best practices and ensemble skills for live performances, resulting in a 40% improvement in their individual skills

SELECTED PROJECTS

[Healthcare Analytics \(Tableau\)](#) – **Business Intelligence Analyst**

- Harnessed SQL and Tableau for data extraction, analysis and visualization, catalyzing a 10% increase in operational efficiencies
- Effectively communicated complex healthcare data to executives, highlighting actionable insights for strategic improvements
- Utilized knowledge gained from conversations with data experts and business stakeholders to identify key trends and patterns within the data, allowing for more accurate forecasting and strategic planning initiatives

[Analyzing Athena Softworks Customers and Gaming Market \(Python\)](#) – **Business Analyst**

- Analyzed and segmented the gaming market using advanced factor analysis, cluster analysis, and regression models in Python to identify an acquisition target with the highest return on investment, resulting in an increase in market share
- Charted and implemented Gabor-Granger pricing models based on customer willingness to pay across various segments, leading to a 15% increase in revenue by effectively tailoring prices to maximize profit potential
- Utilized regression models to recommend strategic decisions in game acquisitions, ultimately increasing customer engagement and conversion rates by 20% through targeted outreach campaigns tailored to key gamer segments

Dognition User Web Behavior Analysis (SQL) – **Data Analyst**

- Improved customer engagement through analysis of user behavior and recommendation of data-driven strategies
- Cleaned 8M row dataset on SQL relational database: removing erroneous data entries and built relational schema
- Constructed advanced SQL queries using CTEs and window functions to develop insight into user behavior patterns

TECHNICAL CAPABILITIES & CERTIFICATIONS

Certificates: Google Data Analytics Certificate, AWS Cloud Certified Practitioner (Expected May 2024)

Software/Skills: SQL, Python (PyTorch, Pandas, Numpy, Sci-kit learn), R, Tableau, PowerBI, Google Analytics, Fivetran, Snowflake, NoSQL, dbt Cloud, Advanced Excel (VBA, Crystal Ball, Treeplan, PivotTable, Solver), A/B Testing, CRM, ETL, JIRA

ML Concepts: Deep learning, Neural Networks, Random Forest, Regression, Clustering, PCA, Decision Trees, Regularization