


ELIZABETH HO

Data Scientist

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Business-minded data scientist with proven ability to initiate and implement innovative solutions, partner cross functionally, provide relevant and actionable data insights. Strong proficiency in marketing and customer analytics.

SKILLS

Programming Languages: R, SQL, Python, Scala and SAS.

Analytical Tools: H2O.ai, Databricks, Adobe Analytics, Power BI, Google Analytics IQ Certification, Excel, and Tableau.

Techniques: Classification and Regression Algorithms, Clustering and Customer Segmentation, Time Series Forecasting, Same Store Sales, Market Basket Analysis, Hypothesis Testing, Machine Learning Modeling and Performance Analysis.

Organizations: Women in Data Dallas Leadership Team – Strategy Lead. Grew membership from 20 to 700+.

WORK EXPERIENCE

CUSTOMER ANALYTICS AND ENTERPRISE INSIGHTS ANALYST

May 2019 – Mar 2020

Solvegy Consulting, Dallas, TX

- Worked directly with VP of Digital Marketing of restaurant and gaming chain with \$1.3 billion in revenue to launch **customer segmentation** strategy and targeted offers **that resulted up to 11% revenue lift**.
- **Data mining and data engineering** to **create datasets** that resulted in integrated consumer view by processing billions of rows of **big data** from disparate sources including Azure data lake and Microsoft SQL Server using R, Scala and SQL.
- Defined KPIs and developed **data visualization** dashboards using Power BI for reporting of product launches with focus on **identifying meaningful insights** and opportunities to improve performance.
- Identified gaps in data platform and executed solution by installing Azure Databricks Spark environment including cluster creation, installation of libraries, and data source connections setup.
- Created **predictive models** in R, Python, Azure ML to identify features that impacted customers returning.
- Performed same store sales analysis to identify characteristics and performance metrics affecting changes in revenue using H2O.ai and R.
- Analyzed business challenges and root causes of data inconsistencies, gave recommendations to business stakeholders and **collaborated cross functionally** to develop new **ETL** processes that resulted in more accurate insights into customer behavior and ROI.
- Research machine learning and data analysis tools within **Azure** environment and gave **presentation** of recommendations and demo to CIO and technology team.

DIGITAL MARKETING SPECIALIST

Dec 2013 – Dec 2016

De Rose International, Los Angeles, CA

- Created an online lead generation and sales strategy utilizing targeted marketing, Facebook and Google ads, email campaigns, content creation and SEO that resulted in costs savings and transforming a predominantly referral-based business.
- Implemented Infusionsoft as platform for sales and marketing automation, e-commerce, and CRM.

REALTOR

Jul 2002 – Dec 2013

Allie Beth Allman & Associates / Keller Williams / Virginia Cook Realtors, Dallas, TX

- Assessed needs and objectives of clients to advise throughout the sales process utilizing critical thinking skills and industry relationships to achieve desired results under typically tight deadlines.
- Analysed sales data and economic reports to develop market analysis and identify market trends, property values and pricing to negotiate the optimal outcome for clients.
- Developed a specialization and branding niche for working with urban infill multifamily properties.

CONSULTANT

Jun 1998 – Jun 2002

Deloitte Consulting, Dallas, TX

- Lead team of contract developers for testing of PeopleSoft reporting.
- Interviewed users and translated user requirements into comprehensive technical and business requirements while identifying key issues and gaps and recommending use of emerging technologies.
- Coordinated critical communication between client and consultant teams on large PeopleSoft implementation project for Fortune 100 company delivering testing and data validation results.

EDUCATION

Master's in Business Analytics

GPA: 3.97

University of Texas at Dallas, Richardson, TX

May 2020

Bachelor's of Business Administration in Business Analysis / Management Information Systems

magna cum laude

Texas A&M University, College Station, TX

May 1998

PROJECTS

- **Who are my best customers?** Sales Data Analysis and Customer Segmentation – Feature engineered customer attributes from 2.2 million transaction line items to segment customers for targeted marketing using R. Models applied: sales forecast, price elasticity, and several clustering models. Performed market basket analysis using PySpark.
- **Do drunk driving laws reduce traffic deaths?** Panel data analysis in R – Statistical data analysis, exploratory data analysis, hypothesis testing and data visualization. U.S. Department of Transportation Fatal Accident data.
- **Which customers are more likely to return and why?** Prediction Classification and Machine Learning Interpretability – Data pre-processing in Python. Model development and interpretation using H2O.ai and LIME.
- **Has the US flattened the curve?** – Covid-19 new cases/deaths by state. Data Visualization in Tableau.
- **Machine Learning in Python for Fraud Detection** – Classification and Regression problem using Pandas, NumPy, Matplotlib, SciKit-learn libraries. Model tuning using cross validation.

More information on projects available at elizabethho.com