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PROFILE

As an experienced quantitative data scientist, I have a passion for insight discovery through the mining of data using SAS and other business intelligence tools. In this vast and growing field, I take special interest in industries rich with data where I am skilled at the entire process of insight generation---from importing/summarizing data across disparate data sources to using advanced statistical methods to gather insights and predictions that support more informed decision making. Although I have held leadership positions and am capable of leading others, my passion is DOING. I love the analysis itself and have always felt the best leaders are those who know how to do the heavy-lifting, yet able to provide simple answers to complex questions in ways that others understand. I gravitate toward opportunities that broaden my analytical skill set (whether it be to learn a new skill or a new industry), and encompass the entire analytical process.

Advanced Statistical Tools: SAS base/stat, SPSS, UNICA Affinium

Business Intelligence Tools. Business Objects, Tableau, SQL

Statistical Techniques: Time-Series Forecasting, Cluster Analysis, Linear Regression, Logistic Regression, Discriminant Analysis, Principal Component and Factor Analysis, Statistical Quality Control, CHAID, Hypothesis Testing, Test/Control Experiments, imputing missing values, writing ad-hoc simulations

Marketing Research/Data: Writing surveys, analyzing and presenting results, using purchased data

Microsoft Office: Regular use of advanced features in Excel and PowerPoint

Industries: Retail, Health Insurance, E-Commerce, Women's Health Website, Beauty Services, Banking, Airlines, Consumer Durables, Packaged Goods, Loyalty Programs, Travel & Leisure, Automated Retail, News & Information, Affinity Clubs, Pharmaceutical

EXPERIENCE

5/04 to present

Independent Predictive Data Scientist (d.b.a Mathnetix)

As an independent consultant, I deliver predictive analytic services to a variety of clients in a variety of industries. Typically, my work is billed either hourly or by project acting as a third party to a larger consulting group, where I provide my own computing resources and software. Although each project is unique, most work falls into the following categories and has pertained to analytics pivoted on a unique customer/patient (or store/facility) with a unique ID.

- **Tracking.** Providing longitudinal insight in aggregate and in detail. Most tracking projects involve not only reporting on what already happened but using this information to PREDICT what will happen. This information is often used to support budgeting and planning decisions.
- **Optimization.** Using advanced statistical methods to build equations that score customers/patients on their likelihood to engage or behave a certain way in the future. This information is used to drive business strategy and customer/patient engagement rules. A large part of the optimization process is not so much in choosing the correct statistical method, but in being able to identify the right question to model and in being able to use advanced statistical tools such as SAS to derive variables that feed the predictive process.
- **Measurement.** Designing test/control experiments followed by a programming exercise to measure the impact of a business decision at various levels of detail. Although simple in concept, many measurement projects have some sort of complication in practice due to unforeseen circumstances that the statistician has to consider.

One of the most challenging assignments was performing 100% of the transactional data & financial analysis to design, simulate and measure a customer loyalty program for one of the nation's largest and youngest retailers. Adding to the complexity was an unexpected weather situation during testing that required a significant amount of data inference to enable trustworthy measurement.

Targetbase

Irving, Texas

4/98 to 4/04

Vice President, Strategic Business Analysis

Led database analysis projects across a host of different industries, managed junior staff members, designed analytical solutions and advised as subject-matter expert on behavioral segmentation.

- **Air Transportation.** Introduced a frequent flyer program to behavioral segmentation and predictive modeling, enabling a more targeted approach to marketing strategy. Built an Excel-based, parameter-driven forecasting tool to support budgeting and planning. Managed junior staff members who performed monthly reporting and tracking.
- **Consumer Durables.** Designed and led the development of a behavior-based customer segmentation solution that spanned six different product and service divisions used as a foundation for customer contact and retention.
- **Utility.** Mined consumer data with regard to electricity usage and participation/enrollment in various service offerings in order to gain insight with respect to customer retention efforts in anticipation of deregulation of the residential market.
- **Pharmaceuticals.** Measured the performance of various direct-to-consumer campaigns, including response rates, ROI and respondent profiles. Consulted on alternative methods to segment the database.
- **Retail.** Invented a new technique for profiling retail customers in relation to other customers so as to determine those departments that were unique drivers of customer repeat.
- **Grocery.** Designed a segmentation solution for a national grocery chain whereby customers were segmented according to their basket size, contents of their basket, and placement within a predicted purchase cycle.
- **Consumer Packaged Goods.** Profiled customers using secondary research and designed marketing research studies for a number of consumer goods manufacturers.

The SABRE Group

Fort Worth, Texas

3/95 to 4/98

Manager/Director, CRM Consulting

Designed and programmed a behavior-based customer segmentation solution for one of America's national retail banks. At the time, this was cutting-edge work, new for our team and new for our client. Synthesizing data from multiple channels, customer accounts were classified into unique segments within and across ten different financial products. A number of statistical techniques were used including principal component analysis and cluster analysis.

1/89 to 3/95

Senior Consultant, Airline Yield Management Solutions

Designed, developed and tested mathematical decision models into *AIRMAX*, a revenue management decision-support system marketed to airlines around the world. In this role, I devised algorithms for forecasting demand and cancellations, identifying critical flight loads and measuring the financial sweet-spot for each flight. I also worked with C++ programmers to implement and test the solutions, designed software user-interfaces and traveled the globe to assist implementation.

3/88 to 1/89

Consultant, SABRE Decision Technologies

SABRE was a reservations system used by hundreds of travel agencies across the US, each with support needs as they used American Airline's premier reservation system. On my first assignment as a recent graduate, I used information about each travel agency to predict their future support needs. Using this alongside geographic information, I then formulated contiguous sales territories for SABRE staff such that each territory had an equal or near-equal opportunity for commissions.

EDUCATION

M.S. and B.S Quantitative Business Analysis

Louisiana State University, Baton Rouge May 1988 and May 1986, respectively