

## Keywords

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Analytics, Statistical analysis, Predictive modeling, Segmentation, SAS

## Work Experience and Skills Summary

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- Over 3.5 years work experience in statistical analysis and predictive modeling for Personal Insurance, Commercial Insurance, Retail and Banking domains
- Proficient with SAS : Enterprise Guide, PC SAS, Unix SAS: Base SAS, SAS Stat, Macros, SQL Procedure, connecting to DB2 and ORACLE databases through SAS
- Working knowledge of SPSS, Treenet, CART, Excel, Powerpoint
- Programming experience using C, C++, PL/SQL

## Education

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- **Master of Operations Research and Computer Applications**, National Institute of Technology (formerly REC), Trichy, India, June 2004 – June 2006
- Bachelor of Mathematics, St Teresa's College, Ernakulam, India, June 2001 - May 2004

## Professional Experience

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**Fractal Analytics (Sep 2007 to Present). Currently deployed Simi Valley at client site (leading insurance provider in the US), Senior Analyst**

- Customer Life Time Value:
  - ✓ Implementation in direct marketing increased IRR by 14%
    - Predicted Customer Life Time and Customer Life Time Value using discrete time logistic regression (Survival Analysis)
    - Automated LTV report generation from raw data processing to final reports generation
- Marketing Campaign Effectiveness:
  - ✓ New Model reduced direct marketing cost by 20%
    - Assessed performance of old cross sell model rate by decile
    - New logistic cross sell model built on SAS
- Interactive Excel-SAS price impact simulator
  - Simulates impact of pricing changes in policy count and revenue
  - Assists Product Managers in making rate changes
- Cannibalization effect of company acquisition:
  - Identified territories with decreased revenues due to acquisition
  - Measured cannibalized revenue
- Cost Benefit Analysis for Home inspection:
  - ✓ Reduced cost of home inspection by 14%
    - Identified risky homes using multinomial model
    - Predicted revenue loss using linear model
- Estimate Profitability of two different channels of business, segregated by agent type

- Developed a logistic model through SAS and a Treenet model for an Up-Sell campaign
  - ✓ Compared performance and properties of the two models
  - ✓ Implemented the Treenet model to segregate population for the campaign
- Developed a Market Mix model and identified profitable advertising media
- Designed and implemented a huge SAS database from DB2 datasets
  - ✓ Automated weekly refresh and maintenance
  - ✓ Designed and automated multiple reports to support Underwriting, Operations and Sales.
- Currently working on analyzing causes of higher attrition rates in certain geographies ; CART Tree to identify customer segments with higher attrition

#### **Mu Sigma Business Solutions, Bangalore (July 2006 to July 2007), Business Analyst**

- Predicted sales and isolated halo and cannibalization effects of advertising for a leading US fast foods company
- Developed risk score cards for fraud and regular auto loan customers for probability of defaulting for a leading Indian private sector bank
- Predicted customer attrition for a leading online job agency in the US through a logistic model on behavioral data
- Automated multi-view report generation to track distribution changes in book of business, premium and loss across time and geography for a leading US insurance provider

#### **Mu Sigma Business Solutions, Bangalore (Jan 2006 to June 2006), Intern**

- Automated steps preceding model building process, from data cleansing to profiling using SAS macros
- Studied and compared various methods in time series analysis on sales data of a leading US tire manufacturing company

#### **Relevant Academic Projects**

- Logistic difference equation and introduction to chaos (C++, Excel)
- Stochastic L-systems in web browsing patterns