

SUMMARY

- Twenty years of experience in Data Science, Machine Learning, Artificial Intelligence, and Forecasting applied to marketing, retail, banking, telecom, insurance and shipping industries. Models developed include prospecting, churn, segmentation, lifetime value, customer relationship management (CRM), fraud, forecasting, credit risk, and underwriting.
- Seven years of experience as college instructor teaching and developing classes for Data Science programs at both the graduate and undergraduate levels.
- Experienced in managing and developing comprehensive strategy to incorporate analytics within organization. Experience includes recruiting talent, selecting software, and educating organization on use of analytics.
- Experienced in numerous modeling tools including SAS Programming, SAS Enterprise Miner, Python, Python Scikit, Python NLTK, R, Data Robot, and Tableau.
- Education includes PhD in Engineering with specialization in Machine Learning and Data Science methodologies. Also completed MS Management and MS Data Mining.

MODELING APPLICATIONS	ANALYTIC TOOLS	ANALYTIC TECHNIQUES
Customer Analytics (CRM) <ul style="list-style-type: none">• <i>Retention / Churn</i>• <i>Lifetime Value</i>• <i>Customer Segmentation</i>• <i>Customer Response</i>• <i>Survey Response</i>• <i>A/B Testing</i>• <i>IVR Analysis</i>• <i>Survey / Email Analysis</i>• <i>Fraud Analytics</i>• <i>Store Placement</i>	SAS <ul style="list-style-type: none">• <i>SAS Programming</i>• <i>SAS Macro Language</i>• <i>SAS Enterprise Miner</i>• <i>SAS Forecast Server</i> Python <ul style="list-style-type: none">• <i>Python Programming</i>• <i>NLTK</i>• <i>Scikit</i>• <i>Tensor Flow</i>• <i>Jupyter Notebooks</i> Additional Tools <ul style="list-style-type: none">• <i>R Programming</i>• <i>Data Robot</i>• <i>Tableau</i>	Statistical Analysis <ul style="list-style-type: none">• <i>Generalized Linear Models</i>• <i>Multivariate Regression</i>• <i>Logistic Regression</i> Machine Learning <ul style="list-style-type: none">• <i>Decision Trees (Chaid, CART, C5.0)</i>• <i>Gradient Boosting</i>• <i>Random Forests</i>• <i>Neural Networks</i>• <i>Support Vector Machines (SVM)</i>• <i>Clustering / Segmentation</i>• <i>Artificial Intelligence</i> Other Analytics <ul style="list-style-type: none">• <i>Time Series Analysis</i>• <i>Text Mining / Web Mining</i>• <i>Fractal Analysis</i>
Insurance <ul style="list-style-type: none">• <i>Rating / Underwriting</i>• <i>Territory Analysis</i>• <i>Telematics</i> Banking <ul style="list-style-type: none">• <i>Credit Scoring</i>• <i>Default / Loss / Prepay</i>		

EXPERIENCE

2014-Present

DATA SCIENCE CONSULTING
DKW ANALYTICS
Cleveland, Ohio

Independent Data Science consultant available for projects, staff augmentation, and subcontracting. Available for both 1099 and W2. Projects completed include:

- Time series forecast of package deliveries : **Federal Express**
- Business Knowledge Series (BKS) Instructor: **SAS Institute**
- Credit risk models for an Israel based lender
- Determined optimal theater locations for *Atlas Shrugged: Who is John Galt?*
- Customer Segmentation : **Bridgestone**
- Health Care cost analytics for Chicago based healthcare corporation
- Telematics data analysis for California based telematics company

2013-Present

INSTRUCTOR OF DATA SCIENCE
Master of Science of Data Science (MSDS) Program
Northwestern University; Chicago, Illinois

- Taught for numerous Data Science courses at Graduate/Undergrad Level
- Developed Data Science courses in statistics and machine learning
- Content advisor for various universities initiating Data Science programs

2016-2018

DIRECTOR OF DATA SCIENCE
Sprint Corporation; Overland Park, Kansas

- Developed Corporate Analytic Center of Excellence
- Recruited, hired, trained, and managed team of Data Scientists
- Presented results to corporate “C-Level” officers
- Personally Developed or Managed the Development of Models for:
 - Customer Segmentation
 - Customer Churn and Lifetime Value Models
 - Customer Upsell / Cross Sell Models
 - Customer Behavioral Triggers
 - Retail Store Placement
 - Artificial Intelligence / Text Analytics for Customer Chats
 - IVR Customer Data

2007-2016

DATA SCIENCE ENGINEER
SAS Institute; Cary, North Carolina

Developed predictive models for Banks, Insurance Companies, Retail, and Telecom. Models developed included:

- Credit Risk Models
- Insurance Risk Models
- Customer Segmentation
- Customer Churn and Lifetime Value Models
- Customer Behavioral Triggers
- Text Analytics on email data, customer chats, call center notes
- Retail Store Placement
- Fraud Models

2010- 2011

MANAGEMENT SCIENTIST OF ANALYTICS
Accenture Consulting; Chicago, Illinois

- Managed Team of Data Scientists
- Developed or Managed the Development of Models for:
 - Customer Acquisition and Segmentation models
 - Time Series Analysis for Loan Defaults

2005-2007

PRODUCT MANAGER, ANALYTICS RESEARCH AND DEVELOPMENT
Progressive Insurance; Mayfield, Ohio

- Managed Team of Data Scientists
- Personally Developed or Managed the Development of Models for:
 - Insurance Risk
 - Customer Churn and Lifetime Value Models
 - Territory Risk Models
 - Text Analytics of Customer Email
 - Telematics Data Analytics

1999-2005

VICE PRESIDENT OF ANALYTICS
SENIOR MODELER / MANAGER
Key Bank Corporation; Cleveland, Ohio

- Recruited, hired, trained, and managed team of Data Scientists
- Presented results to corporate “C-Level” officers
- Personally Developed or Managed the Development of Models for:
 - Credit Risk
 - Customer Segmentation
 - Customer Churn and Lifetime Value Models
 - Customer Behavioral Triggers
 - Financial Manager Attrition

1998-1999

ARTIFICIAL INTELLIGENCE SPECIALIST
Pegasus Technologies; Mentor, Ohio

- Electric Power Plant Simulation Models
- Customer Training Classes on Statistics and Neural Networks

1988-1998

SOFTWARE ENGINEERING

Worked on numerous object oriented software engineering projects as both lead software engineer and team member. Languages include: Java, C++/C, and Ada.

- **Noteworthy Medical Systems; Cleveland, Ohio**
- **Photonics Systems; Toledo, Ohio**
- **Loral Defense Systems; Akron, Ohio**
- **Naval Aviation Depot; San Diego, California**

EDUCATION

ENGINEERING
EDUCATION

PH.D. ENGINEERING SCIENCE
University of Toledo

M.S. Engineering Science; University of Toledo
B.S. Electrical Engineering; University of Toledo

- Data Science / Machine Learning / Artificial Intelligence
- Statistical Analysis
- Computer Engineering

DATA MINING
EDUCATION

M.S. DATA MINING
Central Connecticut State University

BUSINESS
EDUCATION

M.S. MANAGEMENT
University of Akron