

SUMMARY

- Twenty five years of experience in Data Science, Machine Learning, and Forecasting applied to marketing, financial services, health care, retail and other industries.
- Ten years of experience as college instructor teaching and developing classes for Data Science, Industrial Engineering, and Marketing programs at both the graduate and undergraduate levels.
- Pragmatic approach to analytics focusing on usability and understanding of models.
- Education
 - PhD Engineering – Machine Learning and Artificial Intelligence
 - MS Engineering – Software Development and Statistics
 - MS Management – Marketing and Finance
 - MS Data Mining
 - BS Electrical Engineering

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>Store Location Analysis</i>	Python <ul style="list-style-type: none">• <i>Python Programming</i>• <i>Scikit</i>• <i>Tensor Flow</i>• <i>NLTK</i>• <i>PySpark</i>	Statistical Analysis <ul style="list-style-type: none">• <i>Generalized Linear Models</i>• <i>Multivariate Regression</i>• <i>Logistic Regression</i>
Insurance <ul style="list-style-type: none">• <i>Rating / Underwriting</i>• <i>Territory Risk Analysis</i>• <i>Usage Based Analysis</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>	Machine Learning <ul style="list-style-type: none">• <i>Decision Trees</i>• <i>Gradient Boosting</i>• <i>Random Forests</i>• <i>Deep Learning Neural Networks</i>• <i>Support Vector Machines (SVM)</i>• <i>Clustering / Segmentation</i>• <i>Artificial Intelligence</i>
Banking <ul style="list-style-type: none">• <i>Credit Risk Scoring</i>• <i>Default / Loss / Prepay</i>	Additional Tools <ul style="list-style-type: none">• <i>R Programming</i>• <i>Amazon Web Services (AWS)</i>• <i>Microsoft Azure</i>	Other Analytics <ul style="list-style-type: none">• <i>Time Series Analysis</i>• <i>Natural Language Processing</i>• <i>Variable Selection / Reduction</i>• <i>Fractal / Chaos Analysis</i>
Health Care <ul style="list-style-type: none">• <i>Claims Payment Models</i>• <i>Statistical Analysis</i>	<ul style="list-style-type: none">• <i>SQL</i>• <i>Tableau</i>• <i>Data Robot</i>	

EXPERIENCE

2018-Present

**DATA SCIENCE CONSULTING
DKW ANALYTICS
Cleveland, Ohio**

Independent Data Science consultant available for projects, consulting, and subcontracting. Available for both 1099 and W2. Practice utilizes Python, SAS, and R programming. Use cases include:

- Credit and Insurance Risk
- Customer Retention / Lifetime Value Analysis
- Statistical Analysis of Medical Data
- Time Series Forecasting
- Natural Language Processing
- Clustering / Segmentation
- Ad Hoc Analysis
- Converting SAS Code to Python

2013-Present

**INSTRUCTOR OF DATA SCIENCE
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:
 - Artificial Intelligence / Machine Learning
 - Customer Segmentation
 - Customer Churn and Lifetime Value Models
 - Customer Upsell / Cross Sell Models
 - Customer Behavioral Triggers
 - Retail Store Placement
 - Text Analytics

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
- Development of Predictive Models for Banking and Insurance Clients:
 - 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 SCIENCE
EDUCATION**

M.S. DATA MINING
Central Connecticut State University

**BUSINESS
EDUCATION**

M.S. MANAGEMENT
University of Akron