JOSIAH DAVIS

COMMITTED TO CURIOSITY

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Statistics

Experience applying and teaching wide variety of classical and modern statistical modeling techniques ranging from linear regression to ensemble methods.

Data Mining

Enjoy learning new technical concepts – Practical and teaching experience in multiple programming languages including Python and R.

Consulting

4 years of experience creating quantitative analyses that shape the direction of large organizations across multiple industries.

PROJECT SPOTLIGHT

A large client is seeking to significantly increase the efficiency of their core business process. This project's stated goal is to utilize machine learning techniques to analyze and improve their process.

- Led the scope, creation and communication of 5 high-leverage deliverables focusing on analytics and process improvement.
- Presented on a regular basis to our senior-most client, a Project Manager responsible for a multi-million dollar transformation initiative.
- Created difference-in-difference model using a Kaplan-Meier survival curve to evaluate the effectiveness of the client initiatives aimed at transforming their core business process (in R).
- Created Classification and Regression Trees that modeled the probability of process rework, which was previously identified as a significant factor for process efficiency (in R).
- Created a discrete event simulation model of the client's core business process (in Python).
- Visualized the results of a Market Basket Analysis to identify clusters of common claim types (in D3.js).
- Identified process improvement recommendations based on analysis that will decrease end-to-end processing time by 40% (based on conservative, internal estimate).
- Earned the Outstanding Performance Award for exceeding the client's expectations (highest distinction for client service).

PROFESSIONAL HISTORY

Deloitte Consulting LLP – *Consultant*   Feb 2012 – Present   (3 y)
- Experience providing quantitative consulting services including predictive modeling, process improvement, performance management, and simulation.

General Assembly – *Instructor for Data Science*   Sept 2014 – Present   (5 m)
- Co-instructor for adult students participating in General Assembly's 11-week course on Data Science. Course covers the complete data science pipeline with a focus on data mining in Python.
- Data mining techniques include Linear and Logistic Regression, K-means clustering, Classification and Regression Trees, Random Forests, and Boosted Trees.

Lockheed Martin – *Engineering Analyst*   July 2011 – Jan 2012   (6 m)
- Authored innovative manufacturing policy estimated to save 1,400 work hours annually (based on internal estimates) for the Joint Strike Fighter (JSF) program.

Johnson and Johnson – *Supply Chain Analyst (Co-Op)*   Jan 2011 – June 2011   (6 m)
- Analyzed the costs/savings associated with the construction of a dedicated return center for Johnson and Johnson's consumer products business.
- Return center proposal was accepted on the basis of my analysis and is projected to reduce costs by $3M annually.

ACCOLADES

Josiah is an integral part of the Process Analytics team. His technical and interpersonal skills are clearly above his peers.

What is most impressive about Josiah is his genuine intellectual curiosity and his ability to solve complex problems in clever ways…. He'll make you love what you do just because he does too.

Josiah has been a pioneer in solving client problems… He has set the pace for what is expected for a consultant at any level and has pushed up the bar for his project team.

Gagan Tandon
Manager at Deloitte

Dan Henebery
Consultant at Deloitte

Yoon Ji
Manager at Deloitte

SKILLS

Statistics

–   Hypothesis Testing
–   Linear and Logistic Regression
–   K-means Clustering
–   Naïve Bayes Classification
–   Classification and Regression Trees
–   Random Forests and Boosted Trees
–   Survival Analysis
–   Discrete Event Simulation

Technology

–   R (Proficient)
–   Python (Proficient)
–   Tableau (Proficient)
–   D3.js
–   Git
–   Github
–   MATLAB
–   Java

Certifications

–   Six Sigma Green Belt
–   Member of Mensa
–   Engineering in Training

EDUCATION

University of Maryland, B.S., Mechanical Engineering (Honors)

–   Completed Degree in Dec 2010 with 3.917 In-Major GPA, 3.815 cumulative GPA and made Dean's List every semester.
–   Received As in all math-related coursework including coursework on Calculus, Probability and Statistics, and Differential Equations.
–   Led the award-winning Senior Design Project that was chosen as the primary example for the Clark School Mechanical Engineering design textbook.
–   Managed hall of 70 freshman students for 2 years and achieved < 5 incidents each year in dorm with prior reputation for extreme misconduct and unruly behavior.
–   Turned down offer of fully funded PHD in Electrical and Computer Engineering at Georgia Tech