

JOSIAH DAVIS

DATA SCIENTIST

EXPERIENCE

General Assembly (Data Science Instructor)

October 2014 – Present

Co-instructor for the 66-hour course on Data Science. Course covers complete data science pipeline with a focus on predictive analytics in Python.

- Deliver lectures on statistical topics including Linear and Logistic Regression, K-Means Clustering, Classification and Regression Trees, and Ensembles.
- Supervise and coach students in their development of portfolio projects.
- Develop curriculum and create teaching materials.
- Rated by students as one of the top 2 Data Science instructors across all campuses.

Deloitte Consulting (Consultant & Data Scientist)

February 2012 – Present

Provide high-leverage quantitative services including predictive modeling, process improvement, performance management, data visualization and data engineering.

- Intimately involved with all aspects of deliverable creation for senior-, director-level clients including ideation, technical creation, scope management, and communication of results.
- Created a Classification Tree to predict the probability of process rework in manufacturing-type setting (in R).
- Visualized the output of the Classification Tree algorithm (in D3.js).
- Conducted regression analysis to determine drivers of operational performance (in Python).
- Engineered a new metric representing active touch time to measure process complexity (in Python).
- Contributed to the creation of a discrete-event simulation of key business operations (in Python).
- Implemented a Kaplan-Meier survival curve to evaluate the effectiveness of client transformation initiatives (in R).
- Visualized the results of a Market Basket Analysis (in D3.js).
- Provided contributions leading to a contract expansion that doubled the revenue for our project work-stream.
- Earned the Outstanding Performance Award.

SlideRule (Data Science Expert Mentor)

February 2015 – Present

One-on-one mentor for 4 participants of "Intro to Data Science" workshop, covering the entire data science pipeline in R.

Lockheed Martin (Engineering Analyst)

July 2011 – January 2012

Conducted analysis on the operational quality of the supply base for the Joint Strike Fighter (JSF) airframe. Authored major revision of manufacturing policy estimated to save 1,400 work hours annually (based on internal estimates).

Johnson and Johnson (Supply Chain Analyst (Co-Op))

January 2011 – June 2011

Analyzed the costs and benefits associated with the construction of a dedicated return center for Johnson and Johnson's supply chain organization. Return center proposal was accepted on the basis of the analysis and is estimated 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.



Gagan Tandon

Manager at Deloitte



Dan Henebery

Consultant at Deloitte



Yoon Ji

Manager at Deloitte

SKILLS

Statistics:

Hypothesis Testing, Probability Distributions, Bootstrapping, Linear Regression, Logistic Regression, Survival Analysis.

Machine Learning:

K-means Clustering, Naïve Bayes Classification, Classification & Regression Trees, Random Forests, Boosted Trees, Cross-Validation.

Python:

Pandas, Scikit-learn, StatsModels, NumPy, Matplotlib, Beautiful Soup, Requests, NLTK, re.

R:

dplyr, plyr, rpart, caret, survival, e1071, randomForest.

Other:

Tableau, D3.js, Git, Github, Matlab, Java, SQL.

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