**Josiah Davis**

*Data Scientist*

**Experience**

**Slalom Consulting** (Data Scientist)

**June 2015 – Present**

Acting as a lead Data Scientist for the San Francisco office in a range of industries including Utilities, Healthcare, Technology, and Retail.

* Created and validated machine learning models to quantify the relationship between weather and electricity consumption for individual customers (used R: tidyr, purrr, earth, ggplot2, rpart, randomForest, data.table).
* Designed and created a new report to measure risk and concentration of a bank’s client portfolio (used Python: Pandas).
* Conducted a sentiment analysis using the textual content of client’s Yelp Reviews in order to assess customer bias (used python: NLTK and scikit-learn and R: )

**Learning Data Science** (Creator)

**August 2016 – Present**

Created company to provide training and educational services for individuals and companies seeking to transition into the field of Data Science.

* Provide in-person workshops on a multitude of topics within Data Science: Data Analysis, General Linear Modeling, Natural Language Processing, Machine Learning, Ensemble Modeling, Data Visualization, Python, R programming
* Created an online e-mail mini-course with free instruction and guidance for breaking into the field of Data Science
* Currently developing an online video course covering the complete Data Science pipeline.

**General Assembly** (Data Science Instructor)

**October 2014 – May 2015**

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

* Deliver [lectures](https://github.com/justmarkham/DAT3#dat3-course-repository) 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** (Data Scientist)

**February 2012 – May 2015**

Provide high-leverage quantitative services for Federal Government clients in Washington DC including hypothesis testing, process improvement, machine learning and metric design.

* 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 (using R and D3.js).
* Designed and created prototype of new metric representing active touch time to measure process complexity (in Python).

**SlideRule** (Data Science Expert Mentor)

**February 2015 – February 2016**

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

**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.

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| **Accolades** |
| *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’s] intellectual horsepower provided credibility to engage the key stakeholder who had initially voiced concern about the project... Josiah’s collaboration quickly turned a doubter into an advocate and extended team member.* |
| https://media.licdn.com/media/p/1/000/1e4/238/1538fc4.jpg  **Dan Henebery**  Teammate at Deloitte | | https://media.licdn.com/media/AAEAAQAAAAAAAAaNAAAAJGUxOTBjZmVlLTFmMWYtNDA0OS1hMTBiLWM3MTZhMzJkNGFhYg.jpg  **Aaron Hardisty**  Teammate at Slalom |

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| **Skills** | | | |
| **Modeling**   * Linear/Logistic Regression * Clustering * CART * Model Validation * Random Forests, Boosted Trees * MARS * Cross-Validation | **Statistics**   * Bootstrapping * Maximum Likelihood Estimation * Hypothesis Testing * Bayesian Inference * Survival Analysis * Data Visualization | **Python**   * Pandas * Scikit-learn * StatsModels * NumPy * Matplotlib * Beautiful Soup * NLTK | **R**   * dplyr/ tidyr * ggplot2 * data.table * rpart/randomForest * earth * stringr * devtools/roxygen2 |

**Education**

**University of California, M.A., Statistics**

* Expected completion of Degree in May 2017
* Coursework in Statistics, Probability, Linear Modeling, R Programming, with a specialization in Causal Inference
* Team leader for group of four graduate students to create an R package for Multiple Factor Analysis, an extension of Principal Component Analysis for multiple groups.

**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.