

Greg Faletto github.com/gregfaletto | [linkedin.com/in/greg-faletto-11767042](https://www.linkedin.com/in/greg-faletto-11767042)

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Projects **Concert Set List Predictor** Feb 2017 – Present

Created an algorithm to generate predictions of bands' future concert set lists using database of past set lists. Wrote an R script that calls the setlist.fm API, collects set lists, and implements the algorithm.

Presidential Candidate Viability Metric Apr 2016 – Jun 2016

Inferred public perception of candidates' viability from online betting market. Info: <http://bit.ly/2m6w71D>

Summary of Skills **Programming Languages Used:** R, Python (with NumPy package), Octave/Matlab.

Modeling Methods: Linear & logistic regression, k-NN, linear/quadratic discriminant analysis, naïve Bayes, trees (inc. bagging, boosting, & random forests), SVMs, neural networks, other non-linear modeling (step functions, piecewise polynomials, smoothing splines, general additive models, LOESS).

Modeling Techniques and Concepts: Bootstrap, bias/variance tradeoff, (k-fold) cross-validation, best subset selection, forward/backward stepwise selection, ridge regression, lasso, principal components regression, partial least squares, big data (Data parallelism, stochastic/mini-batch gradient descent).

Unsupervised Learning: Clusters (k-means, hierarchical), PCA, anomaly detection (multivariate Gaussian).

Data Visualization: R's ggplot2 package: aesthetics, attributes, various plot types, qplot.

Data Science Courses **Coursera (Erasmus Uni. Rotterdam)**—"Econometrics: Methods and Applications:" Completed May '17

Lagunita (Stanford University)—"Statistical Learning" (Hastie/Tibshirani): Completed Dec 2016; "SQL" (Widom): *In progress*; "Introduction and Relational Databases" (Widom): Completed Jan. 2017.

Coursera (Stanford University)—"Machine Learning" (Andrew Ng): Completed Apr. 2016.

Datacamp—"Introduction to R:" completed Apr. 2016; "Intermediate R:" Apr. 2016; "Data Visualization with ggplot2:" Apr. 2016; "Intro to Python for Data Science": Dec. 2016.

Education **Washington University in St. Louis** Aug 2006 – Dec 2009 **Bachelor of Arts, Physics**

- 3.85 GPA, Dean's list every semester, graduated Phi Beta Kappa, College Honors in Arts & Science.
- Physics major coursework, plus computer programming, advanced math, and economics.
- Recipient of William George Eliot Scholarship and National Merit Scholarship.

Work History **Independent Audio Engineer** 2012 – Present

Work primarily in live sound, with some studio experience. Clients include musicians (Stevie Wonder, Lady Gaga, John Mayer), comedians (Dave Chappelle), and companies (Adobe, Activision).

- Handle technical issues on a tight timeframe while remaining calm to avoid unnecessary mistakes.
- Rigorously check possible sources of error. Handle inevitable mistakes and oversights as seamlessly as possible, ideally before clients notice. More information at www.gregfmusicproducer.com.

Independent Private Tutor 2009 – Present

- Physics, math (inc. calculus and college-level statistics), chemistry, test prep (GRE, SAT, ACT, etc.).
- Communicate concepts in varied ways to a variety of learners, adapting message as needed.
- Refined my understanding of calculus, statistics, and more through years of teaching material.

Research Assistant (Rebecca Messbarger, Prof. of Italian, History, & Gender Studies) Jun – Aug 2009
Washington University in St. Louis St. Louis, Missouri

Searched for, collected & organized documents & information; scanned & edited images; etc.