Travis T. Byrum

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Education

Duke University   Durham, NC

B.S. Statistics   *2013*
- Senior Thesis: *Wavelet-Based Functional Modeling of Accelerometer Data in Fitness Intervention Study*
- Deans List Fall 2011, Fall 2012, and Fall 2013

Technical Skills

Languages: Python, JavaScript, TypeScript, Go, R, Java, LaTeX

Technologies: Flask, Django, React.js, D3.js, Docker, MySQL, PostgreSQL, Elasticsearch, Linux, aws, Nginx, git, Jira

Skills: Machine Learning, NLP, Clustering, Ensembles, Decision Analysis, Bayesian Statistics, NumPy, scikit-learn, Tensorflow, NLTK, MapReduce

Experience

- *Booz Allen Hamilton Software Engineer*   *September 2017 - Current*
  - Led search backend on Grants.gov refresh integrating ElasticSearch into Flask-powered microservice
  - Designed containerized data pipeline for Grants.gov ETL indexing 40,000+ documents nightly using Apache Airflow
  - Developed for internal cognitive search & virtual assistant platform utilizing Docker, ElasticSearch, scikit-learn, and Tensorflow
  - Created chatbot for award-winning internal investment including both frontend design in React.js and backend architecture

- *Morning Consult Data Scientist*   *October 2015 - September 2017*
  - Worked directly with company co-founders on all phases of polling projects including survey creation, monitoring, and data analysis (*Research has been cited by:* **The Washington Post, New York Times, 538, Fortune Magazine, The Hill, ABC, Huffington Post, Vox, Bloomberg, among others**)
  - Wrote and maintained software packages for in-house modeling and data visualizations using Python and R
  - Developed data infrastructure and API integrations for automatic reporting using D3.js and Flask
  - Constructed state-level and congressional-level election forecasts using mixed-effects modeling cited in several high-readership publications

- *Milwaukee Bucks Analytics Intern*   *October 2014 - June 2015*
  - Used the web application framework Shiny in the R programming environment to create a portal for distributing strategic information to coaches and front office employees
  - Constructed statistical models for tasks such as forecasting career outcomes for drafted players and predicting the efficiency of lineup combinations
  - Designed a framework for performance metrics to aid in player evaluation using several statistical methods
  - Worked directly under the Bucks' Director of Analytics along with front office employees and coaches to assist in evaluating the team's on-court performance

Awards and Activities

- Booz Allen Hamiliton Excellence Awards Team Finalist
- Booz Allen Hamilton Living Our Values Every Day Award
- Represented Milwaukee Bucks at the MIT Sloan Sports Analytics Conference