BRANDON I. KING

Ph.D. Candidate at North Carolina State University | Data Science & Textiles

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DATA SCIENCE EXPERIENCE

Data Scientist Intern | **Naval Information Warfare Center (NIWC)**

May 2019 — August 2019 Charleston, SC

- Collaborated with cross-functional teams on research projects: analyzed and manipulated data, applied statistics concepts, developed metrics to measure results, and integrated new methodologies into existing systems
- Communicated complex analytical topics with Leadership about analyzed data conclusions within the Business Enterprise and Data Analytics department at NIWC to deliver high-quality insights to make data-forward insights
- Contributed to new methodologies that optimized backend methods to perform 99% faster using unsupervised machine learning techniques and algorithms, such as *Term Frequency–Inverse Document Frequency and K-Means Clustering* using data science tool-kits *(Java, Clojure)* to provide data-driven insights

Graduate Research Assistant | **North Carolina State University**

August 2016 — Present Raleigh, NC

- Develop and build clean, efficient, reproducible, and highly scalable *Python* shell scripts to validate appropriate machine learning and big data tools with accuracy, and improve textile manufacturing processes performance
- Design and implement quantitative analysis, machine learning methods, in-depth data exploration, and feature engineering on large, complex, and multi-dimensional data sets to extract insights into textile recycling behavior
- Analyze Big Data from a variety of sources on cardio-respiratory monitoring systems *(using Microsoft Excel, VBA, JMP Pro, and EasyFit)* provided in collaboration with Medical teams to remove bottlenecks for efficient cardiac monitoring

ENTREPRENEURIAL EXPERIENCE

Owner & Lead Tutor | **Beacon of Light Tutoring**

August 2015 — Present Triangle Area, NC

- Passionately serve as a mentor, tutor, and advisor for local middle school and high school students passionate about excelling in Mathematics
- Lead one-on-one sessions for students across all grade levels with their mathematics assignments
- Receive 100% positive feedback from tutees and currently have a 100% success and graduation rate

PRESENTATIONS

King, B.I., Rothenberg, L., Joines, J. *Applying Machine Learning Methods for Insight into Textile Recycling Behavior.* Presented at: 2021 Joint Statistical Meeting; August 2021.

TECHNICAL PROJECTS

Beat the Bookie | *github.com/bking2415/Decision-Tree* | Graduate Certificate Presentation

- Implemented supervised data science algorithms *(Decision tree)* in *R* from ETL and data pipelines to improve the odds to make a profit on small bet lines

Data Analysis and Visualization | *github.com/bking2415/Uber-data-analysis*

- Implemented visible analytic concepts to assist in understanding complex data and gain business insights using *Tableau* and *R* libraries *(ggplot2, dplyr, and tidyr)*

Database Management Systems Project | *github.com/bking2415/WolfHospital* | Graduate Certificate Project

- Created a robust database system using *SQL queries* within *Java* to provide an command line user interface for optimal data ingestion, access and storage via API

EDUCATION

NORTH CAROLINA STATE UNIVERSITY

Raleigh, NC

Ph.D. in Textile Technology and Management

Expected: Fall 2021

Masters in Operations Research

Graduation Date: December 2017

- **Affiliations:** Black Graduate Student Association - *Finance Committee Chair (2018)* | Minority Engineering Graduate Student Association

CLAFIN UNIVERSITY

Orangeburg, SC

B.S. in Applied Mathematics

Graduation Date: May 2015

- Alice Carson Tisdale Honors College Scholar
- **Honors:** Cum Laude | 100 Black Men Scholar
- **Affiliations:** National Society of Black Engineers - *Academic Excellence Chair (2015)* | Kappa Alpha Psi Fraternity, Inc. - *Vice President (2014)*

CERTIFICATIONS

Data Science Foundations Graduate Certificate
by NC State University

Machine Learning Certification
by Stanford University (Coursera)

ACHIEVEMENTS

Microsoft Azure Machine Learning Scholarship
by Udacity

PROGRAMMING LANGUAGES

Python | C | Java | JavaScript | Clojure

STATISTICAL ANALYSIS TOOLS

R | VBA | SAS | JMP | MATLAB

DATABASE TOOLS

SQL

DATA VISUALIZATION TOOLS

Tableau

SOFT SKILLS

Team Oriented | Leadership | Problem Solver | Dependable | Flexible | Determination | Visionary Thinker | Adaptable | Organizer