Derek Kaknes

1726 Maiden Ln SW, Roanoke VA 24015 • Phone: +1 504 270 9744 • E-Mail: Derek.Kaknes@gmail.com • Github: github.com/DerekKaknes

Work Experience

Virginia Tech Center for Biostatistics & Health Data Science   **September 2022**

Research Associate

CBHDS provides expertise in biostatistics, data science, programming, and data management to health- and medically-related research projects carried out by Virginia Tech (and beyond) investigators. CBHDS's goal is to cultivate successful and prolific long-term collaborations, support funded grant proposals, promote peer-reviewed publications, and enhance presentations at professional conferences.

Certilytics, Inc.   **May 2016 – July 2021**

Vice President of Data Science Applications

Certilytics is a healthcare analytics company that provides big data processing, machine-learning and predictive analytics as a service for the largest health insurance companies in the United States.

- Manage a team of data science developers to implement Hadoop, Apache Spark and TensorFlow machine learning applications on a HITRUST secure cluster environment for both on-premises and public cloud deployments
- Develop, deploy and monitor a suite of data science applications that produce analytics driving business and clinical decision making for customers, impacting weekly over 100 million patient lives
- Responsible for developing and automating production-ready data science workflows combining applications in UNIX/Bash, Java/Scala, Python, R, MATLAB, and database DSLs for both SQL and NoSQL datastores
- Collaborate with clinical teams in the design of machine learning applications and develop automated reporting to monitor and review clinical implementation and efficacy
- Monitor and optimize computational performance of data science applications to reliably scale to terabyte-level performance, including system-design, computational resource allocation, and software and algorithm selection and implementation

Fidelity Investments   **April 2015 – May 2016**

Management Consultant, Fidelity Center of Applied Technologies (FCAT)

FCAT serves as an internal incubator for Fidelity Investments with the dual mission of researching and testing new technologies and pursuing proof-of-concepts and minimum viable products for compelling new business products and services.

Prime Student Loan, Inc.   **June 2012 – March 2015**

Co-Founder and CEO

Jefferies & Company   **June 2009 – June 2012**

Investment Banking Analyst, Aerospace & Defense Group

Education

University of Virginia   **September 2005 – May 2009**

School of Engineering and Applied Science
B.S. Biomedical Engineering
Coursework included advanced calculus, differential equations, and non-linear dynamic systems, as well as physiology, biomechanics, and foundational biomedical laboratory techniques. Completed a Capstone Thesis on the use of statistical methods to extract predictive indicators for sleep apnea events in neonatal infants using longitudinal biometric data.

Personal

Boston sports fan and beginner rock climber who enjoys historical podcasts, chasing my toddler around parks and playgrounds, and training a new generation of mathletes.