ALEX STERN

Graduate School of Data Science. University of Virginia







in alexcstern



EXPERIENCE

Football Analytics Consultant

University of Virginia Football Team

- July 2019 Ongoing
- Charlottesville, Virginia
- Co-developed a website that allows coaches to interact with and manipulate visualizations to assist with game-planning
- Developed predictive models for opponent prospecting and game-planning purposes
- Relayed descriptive statistical research to the coaching staff in a colloquial manner that was easy to digest
- Developed models for transfer prospect evaluation

Teaching Assistant, Software Development Methods University of Virginia, Department of Computer Science

- **i** January 2019 May 2019
- Charlottesville, Virginia
- Assisted students during office hours with homework, projects, and technical questions related to software development in Java
- Participated in a TA practicum course to learn how to better assist students

Data Science Intern

Havas Helia

- May 2018 August 2018
- Richmond, Virginia
- Built customer lookalike models used both for in-house tests and by clients
- Wrote Python packages to aid in the retrieval and manipulation of SQL Server data

PUBLICATIONS

Practical Applications of Space Creation for the Modern NFL Franchise

NFL Big Data Bowl, 2020

A statistical research paper utilizing NFL player tracking data to describe the quantitative/algorithmic measurement of space creation by offensive linemen for ball carriers and the consequential monetary discrepancies between a more advanced player grading system and current player salaries.

https://www.github.com/alexcstern/Big-Data-Bowl/blob/master/BigDataBowl.pdf

MOST PROUD OF



Finalist, NFL Big Data Bowl 2020
Player Scouting Algorithm Using Player

Tracking Data

• Presenter: 2020 NFL Combine



A Data Science Student's Algorithm Has the NFL's Full Attention

https://news.virginia.edu/content/data-science-students-algorithm-has-nfls-full-attention

Talking Analytics with Alex Stern (008) https://www.25hourideas.com/podcasts/talking-analytics-with-alex-

Algorithms in the War Room

https://open.spotify.com/episode/ 0sR2iogdepm7X1p5DSliNi?si= 3crR3EMyT8Scp3qCPApbKw&nd=1

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Honorable Mention, Sports Info Solutions Football Analytics Challenge Multi-Level Player Value Evaluation Model



Finalist, UVA Machine Learning for Good

Sign Language Recognition Algorithm

STRENGTHS

Python R Java C++ SAS SQL
Bayesian Inference Graphical Models
Machine Learning Algorithms LaTeX
Image Recognition Computational Efficiency
Data Structures Pure Functional Programming

EDUCATION

M.S. Data Science

University of Virginia

July 2020 - May 2021

B.A. Quantitative Statistics, Computer Science University of Virginia

- **August 2017 May 2020**
- Dean's List of Distinguished Students