

# Austin Stephen

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## Education

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University of Wyoming

Laramie, Wyoming

BS in Computer Science, BS in Statistics, and minor in Honors College candidate

GPA 4.0/4.0

Trustee Scholar, 4-year academic full ride

Anticipated Grad. May 2023

Wyoming Research Scholar (WRSP), 26,700 in research funding over 4 years

## Experience

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University of Wyoming MALLET lab

Laramie, Wyoming

Undergraduate Research Fellow in AI, Funded by WRSP

October 2019 - Current

- Automated algorithm selection and quantified Boolean formulas
  - Contributed an algorithm selection scenario to current ASLIB library in R.
  - Used SLURM HPC scheduler, R, and Bash scripting to run multiple CPU years of computational experiments.
- Stanford AI Index survey of automated algorithm selection contribution
  - Ran a suite of computational experiments included in the 2021 AI index, referenced on pg. 72.

Carnegie Mellon University REU

Pittsburgh, Pennsylvania

Summer Statistics Research Intern

May 2021 - July 2021

- Selected as part of a 15-person cohort to work on research in statistics and data science.
  - Used model-based and hierarchical clustering, principal component analysis, GAMs, KNN, random forest, gradient-boosted trees, kernel regression, and shrinkage techniques like Lasso and Ridge regression.
- Advised by Max Horowitz, the director analytics at the Atlanta Hawks, I contributed first of its kind analysis on player fatigue in the NBA using in-game tracking data and an aggregation of player performance measures.

## Publications & Articles

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Modeling Player Fatigue in the NBA

Pittsburgh, Pennsylvania

Lead author of paper, publication pending

August 2021

Stanford 2021 AI Index

Laramie, Wyoming

Experimental Data Contributor (pg. 72)

December 2020

Zhang, Daniel, et al. "The AI Index 2021 Annual Report." Stanford University.

[index.stanford.edu/wp-content/uploads/2021/03/2021-AI-Index-Report\\_Master.pdf](https://index.stanford.edu/wp-content/uploads/2021/03/2021-AI-Index-Report_Master.pdf)

## Academic Presentations & Tutorials

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Tech Talk Laramie, "Modeling Player Fatigue in the NBA"

Laramie, Wyoming

Attendees: Software developers, faculty at UW, and students at UW.

September 2021

Carnegie Mellon Project Showcase, "Modeling Player Fatigue in the NBA"

Pittsburgh, Pennsylvania

Attendees: Faculty at CMU, guest academics, and industry leaders in the NBA, NFL, MLB, and NHL.

July 2021

WRSP Virtual Symposium, "Improving Automated Machine Learning"

Laramie, Wyoming

Attendees: Undergraduate Researchers and Faculty at UW.

November 2020

## Languages

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Extensive Experience: R

Moderate Experience: Bash Shell Scripting, Python, C, and C++

Basic Experience: X86 assembly language, Java, JavaScript, PSQL, Html, and CSS

## Memberships

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Upsilon Pi Epsilon, Google Developer Student Club, and Diversity in Computing Student Organization.