# **Billy Fryer**

Website
GitHub
Email
LinkedIn

#### PROFESSIONAL CODING EXPERIENCE

## Sports Reference (Link) Data Intern

May 2022 - August 2022

- Researched over 350 colleges historical women's basketball teams back to 1982 NCAA and AIAW merge
- Contributed data to the newest and largest collection of college women's basketball data for new Sports Reference website
- Inserted data to Sports Reference database by querying with MySQL

## John Deere

May 2021 – August 2021

## Data Science and Analytics Intern

- Applied Bayesian priors to risk analysis problems to improve forecasting
- Visualized forecasting intervals with R Shiny Apps for team and external use

#### **TEAM EXPERIENCE**

## NC State Women's Basketball Data and Video Analyst

July 2021 - Present

- Pioneered women's college basketball with the first automated advanced statistical reports to win the ACC Championship and reach the Elite 8
- Created localized app for in game play tracking analysis
- Labeled over 2000 clips per opponent per season for scouting

## NC State Baseball Data Analyst

February 2020 - Present

- Developed Trackman data pipeline from FTP site
- Reduced time to create weekly scouting reports from 8 hours per report to 2

## **UNDERGRADUATE RESEARCH AND OTHER PROJECTS**

## Should I Stay or Should I Go? (Link)

Summer 2022

- Created model to evaluate decision making of baserunners attempting to advance 2 bases using SMT Minor League Baseball Tracking Data
- Winner of Undergraduate Division for the SMT Data Challenge and presented at UConn Sports Analytics Symposium poster session

## Beijing 2022 Biathlon Mass Start Clustering (Link) Spring 2022

 Clustered biathletes from the 2022 Beijing Winter Olympics Mass Start event using k-means algorithm

## Rule changes affecting extra inning game length in Pioneer Baseball League (Link) Fall 2022

- Utilized analysis of variance to look at the effects of a home run derby replacing extra innings in the Pioneer Baseball League
- Received honorable mention at UConn Sports Analytics Conference poster session

#### **EDUCATION**

## North Carolina State University

Double Major: Statistics BS Spanish BA

May 2023, 4.0 GPA

#### Notable Awards/Honors

- Outstanding Senior in Spanish(2022)
- Department of Statistics Undergraduate Graduation Marshal (2022)
- NC State College of Sciences"Think and Do" Feature Student

Article (2022, Link)

- Francis E McVay-Scope Scholarship and Solomon Scholar (2019-23)

#### Extracurriculars

Teaching Assistant (Fall 2020) Sports Analytics Club President Stats Club Vice President College of Sciences Ambassador

#### **SKILLS**

Spanish R SAS (Base Certified) Python MySQL / SQL Power BI Tableau

#### R PACKAGE CONTRIBUTIONS

#### hoopr

- Pulled data from NBA G League API
- Functions published to CRAN

#### **FHSTR**

- Pulled data from NBC Winter Olympics API
- First known Olympics Data Package
- Created accompanying pkgdown website (<u>Link</u>)