#### HARBOUR HARRISON

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#### **EDUCATION**

## Bachelor of Arts, Willamette University Salem, OR, Graduated May 2019

- Major: *Mathematics*, Minor: *Economics*
- Relevant Coursework: Multivariable Calculus, Linear Algebra, Probability and Statistics, Complex Numbers, Labor Economics, Microeconomics, Macroeconomics
- Technical Skills: R, Python, SQL
- Varsity Baseball Team, Pitcher, Outfielder
- Honors Society: Pi Mu Epsilon (Math Society), Chi Alpha Sigma (Scholar Athlete Society)

### UNDERGRADUATE THESIS PROJECT, March 2019- May 2019

Ecological Regression Analysis using GIS and Census Data

- Thesis question: How did people in poverty and certain racial groups tend to vote in the 2016 Presidential Election?
- Used a visual program, QGIS, to represent Census data on race and poverty breakdowns in California counties paired with county voting data as variables for Regression Analysis.
- Determined through Ordinary Least Squares Regression Analysis in R, a relationship with White and impoverished people voting Republican, and Asian Americans voting Democratic in California in the 2016 Presidential Election.

#### **INDEPENDENT PROJECT, October 2018- December 2018**

Advancement of Statistics, Data, & Technology in Baseball

- Researched Moneyball philosophy and how the A's used OBP, SLG, and OPS as main statistics to find undervalued players.
- Used batted ball profiles and the comparison between BA and xBA to evaluate when to shift on a player and their effectiveness on those players.
- Calculated statistics such as WAR, wRC, wRC+.
- Discussed the importance of league and park factors in comparing players and how stats with these adjustments are better for comparison.
- Ran analysis to conclude that WAR is best determinant for player contract value.

#### WORK/ LEADERSHIP EXPERIENCE

# Data Analytics for Jade Necklace LLC, June 2019- Current

- Jade Necklace uses a complex algorithm to make hundreds of thousands of calculated bets on horseracing around the country
- Processing large data in Data Grip each day making sure the algorithm responds correctly, that the necessary data is received, and monitoring race changes that effect our algorithm
- Running analysis on the algorithm to determine the strength and effectiveness of our variables and features.

East Bay Cyclones Travel Baseball Coach, Summer 2018, May 2019- Current

- Head Coach to the 14U Team and Assistant Coach to the 11U Team
- Lead practices, as well as coached in Travel Baseball Tournaments

# University of California, Berkeley Summer Baseball Camp Coach, Summer 2016

• Coached high level baseball players of age 6-15 in hitting, fielding drills, as well as teaching life skills to the campers

# **OTHER INTERESTS**

- 1st Chair Trumpet Player in both ECHS Wind Ensemble and Jazz Ensemble for 3 years
- 1st Chair Trumpet player in Willamette Jazz Collective as well as University Orchestra