

# Marty Jiffar

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## Education

University of Chicago (Chicago, IL)

*Expected June 2020*

- B.A. in Statistics, Minor in Computer Science GPA: 3.24/4.0
- *Honors Include:* Dean's List (2017, 2018)
- *Relevant Coursework:* Algorithms and Data Structures, Numerical Linear Algebra, Applied Regression Analysis, Statistical Theory and Methods, Computer Systems (*current*), Machine Learning in Medicine (*current*)

## Relevant Work Experience

American University ([Xiao Lab](#)), Washington, DC

Computer Science Research Intern

*August 2019 – present*

- Built an [algorithm](#) in Python to randomly sample video triplets from a space of over 95 million combinations for an experiment studying human perception of simulated cloth videos
- Engineered a [website](#) in JavaScript and HTML/CSS and set up a virtual private server (VPS), allowing us to administer the experiment at a significantly faster speed and increase our data from 1500 video triplets to the desired 5000

## Technical Skills

- *Backend:* Python (NumPy, Pandas), Java, C
- *Data:* R, Excel, CSV/JSON manipulation
- *Frontend:* JavaScript, jQuery, HTML, CSS
- *Concepts:* Data structures, algorithms, complexity analysis

## Projects

### Retirement Calculator

- Calculates in Python how a given retirement [portfolio](#) would have fared historically, using S&P 500 returns data, to help plan optimal savings based on the user's annual spending and retirement length
- Inspired by FireCalc, a website with the same user inputs/output but a far greater number of (undisclosed) predictor variables

### Bristol Bay Pay Day

- Uses ex-vessel fish prices and various economic variables (ex. status of economies in the U.S. and Japan; two of Alaskan salmon's biggest markets) to predict how much fishermen will be paid per pound of salmon
- Inspired by working in Bristol Bay, Alaska, where do not release the price per pound until the season is nearly over

### Factor (PayPal Hack-Chicago 2019)

- Website prototype that [rates companies](#) based on their ethical practices, weighted by user's values (eg. wages, diversity)
- Rates the user through their transaction history, based on whether they are sticking to their beliefs

## Leadership

Digital Observers, Naknek, AK

Quality Control (QC) Technician

*June 2018 – July 2019*

- Enforced quality requirements regarding the chilling, bleeding, and floating of over 1 million pounds of salmon for a fleet of 200 fishermen in Bristol Bay, the world's largest sockeye salmon fishery
- Lived on 100-foot long tenders for 5 weeks to collect and report quality data at the time of salmon delivery

College Council, Chicago, IL

Class of 2020 Representative

*September 2017 – June 2018*

- Won an election for class representative to vote on resolutions regarding student resources and equity
- Voted to approve/disapprove funding decisions of the student government finance committee – the primary source of funds for student groups, responsible for disbursing nearly \$300,000 each year