

# 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:* Computer Science with Applications, Algorithms and Data Structures, Analysis of Algorithms, Applied Regression Analysis, Statistical Theory and Methods, Numerical Linear Algebra

## Skills

- *Backend:* Python (NumPy, Pandas), Java, C
- *Data:* R, SQL, CSV/JSON manipulation
- *Frontend:* JavaScript, HTML, CSS
- *Teamwork:* Git repository collaboration

## Work Experience

**American University (Xiao Lab)**, Washington, DC

*Computer Science Research Intern*

*August 2019 – present*

- Cloth Video Experiment
  - Built a sampling algorithm in Python for an experiment studying human perception of simulated cloth videos
  - Built a website to administer the experiment at a significantly faster speed in JavaScript and HTML/CSS
  - Implemented a Python metric to determine trial difficulty and sample for a Gaussian distribution of difficulties
- Administered experiments using virtual reality and haptic force-feedback to study perceived heaviness

<https://github.com/marty-jiffar/triplets>

**Digital Observer**, Naknek, AK

*Quality Control Technician*

*June 2018 – July 2019*

- Assessed quality of over 1 million pounds of salmon in Bristol Bay, the world's largest sockeye salmon fishery

**Georgetown University (Hamilton Lab)**, Washington, DC

*Population Genetics Research Intern*

*June 2015 – September 2015*

- Performed DNA fragment analysis to analyze genetic variation in east coast populations of striped bass

## Activities

**Hallowed Grounds**, Chicago, IL

*Barista*

*September 2017 – present*

- Make espresso drinks and curate the ambiance of UChicago's most popular on-campus coffee shop.

**College Council**, Chicago, IL

*Class of 2020 Representative*

*September 2017 – June 2018*

- Won an election for class representative and voted on student government resolutions promoting student equity

## Projects

**Retirement Calculator**

<https://github.com/marty-jiffar/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

**Bristol Bay Pay Day: a predictive model**

- Uses ex-vessel fish prices since 1984 and various economic variables to predict how much fishermen will be paid per pound of salmon – a figure that Alaskan canneries do not release until salmon season is nearly over