## **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, Analysis of Algorithms, Applied Regression Analysis, Statistical Theory and Methods, Numerical Linear Algebra, Machine Learning in Medicine *(current)*

## **Skills**

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| * *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 <https://github.com/marty-jiffar/triplets>
  + Built an algorithm in Python randomly sampling videos from a space of over 95 million videos 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

**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**

**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