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
- *Frontend:* JavaScript, HTML, CSS
- *Data:* R, SQL, CSV/JSON manipulation
- *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 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

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