Marty Jiffar

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Education

University of Chicago (Chicago, IL)

Expected June 2020

GPA: 3.24/4.0

- B.A. in Statistics, Minor in Computer Science
- 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)

Skills

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

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
- Built 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

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
- Collaborated with fellow QC technicians, tender captains, and fleet managers as a team responsible for an estimated \$40 million in cannery quality bonuses to fishermen

Georgetown University (Hamilton Lab), Washington, DC

Population Genetics Research Intern

June 2015 – *September* 2015

- Performed polymerase chain reaction (PCR), gel electrophoresis, and DNA fragment analysis (using an ABI Prism 3100) to analyze and quantify genetic variation in over 400 striped bass (*Morone saxatilis*)
- Wrote a research paper, presented a <u>PowerPoint</u>, and participated in a poster session with peers to discuss my findings

Projects

Retirement Calculator

• Calculates in Python how a given retirement <u>portfolio</u> 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

Factor (PayPal Hack-Chicago 2019)

• A <u>website</u> that 1) rates companies based on their ethical practices, weighted by user input of their high-priority values (eg. wages, diversity) and 2) rates the user through their transaction history, based on whether they are sticking to their beliefs

Leadership Activities

College Council, Chicago, IL

Class of 2020 Representative

September 2017 – June 2018

• Won an election for class representative and voted to approve or disapprove funding decisions of the SG finance committee – which is responsible for disbursing nearly \$300,000 each year