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:* Machine Learning in Medicine, Computer Systems, Algorithms and Data Structures, Numerical Linear Algebra, Mathematical Probability, Applied Regression Analysis, Statistical Theory and Methods

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 comparing human perception of videos to a neural network's results
- Created a Python metric to quantify the difficulty of each trial: each participant's sample of videos has a Gaussian distribution of hardness scores, skewed harder or easier according to the sampling function input
- 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
- *Frontend:* JavaScript, jQuery, HTML, CSS
- *Data:* R, Excel, CSV/JSON manipulation
- *Concepts:* Data structures, algorithms, complexity analysis

Projects

Mentr ("Best STEM Education Hack", QWER Hacks 2020)
- Facilitates tech mentorship within historically underrepresented groups (eg. LGBT, women, etc.)
- Suggests matches based on shared interests, availability, and identity categories

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

Retirement Calculator
- Calculates in Python how a given retirement portfolio would have fared historically to help plan savings
- Uses S&P 500 returns data, predicts performance based on the user's annual spending and retirement length

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