# Samuel Sharpe

223 West 115th Sreet, New York, NY 10026

☑ sbs2193@columbia.edu

ssharpe42.github.io

Ssharpe42

□ (301) 412-1930

# Education

Columbia University

New York, NY

M.S. in Computer Science, GPA: 3.86

Expected May 2020

Machine learning specialization

Columbia University

New York, NY

B.S. in Operations Research, GPA: 3.98, Magna Cum Laude

Sep. 2013 - May 2015

o Stephen D. Guarino Memorial Award in Industrial Engineering - Awarded to a senior with outstanding academic achievement and potential.

**Oberlin College** 

Oberlin, OH

B.S. in Mathematics, Economics Minor, GPA: 3.63

Sep. 2010 - May 2013

# Skills

# Programming/Technology

Python, R/RShiny, MATLAB, SQL, Airflow, Docker; Exposure to Kubeflow, Java, MongoDB, AMPL

Machine Learning, Optimization, NLP, Deep Learning, Stochastic Modeling, Speech Processing

# **Research & Publications**

#### **Publications**

• Visual natural language query auto-completion for estimating instance probabilities. Samuel Sharpe, Jin Yan, Fan Wu, Iddo Drori; CVPR Language and Vision Workshop, 2019.

# **Course Research**

- Meta-Learning for Online Clustering. Spring 2020.
- o Stylometry in the Modern Era: Coreference and Voice for Authorship Attribution. Spring 2019.

*Jan.* 2019 – May. 2019

- o Business to business start-up that connects patients with clinical trial sites through their physician.
- o Research focuses on natural language processing of medical record text for deidentification.

# Experience

### Major League Baseball Advanced Media (MLBAM)

New York, NY

Data Scientist

Iune 2018 - Present

- o Deployed pitch classification neural network in Tensorflow and custom endpoints for live pitch classification locally at ballparks.
- o Created player matchup prop bet lines that outperform predictions from industry leaders in sports betting.
- o Designed pitch arsenal identification system using clustering and classification to detect when pitchers add new pitches to their arsenal.

**Booz Allen Hamilton** Washington, DC

Lead Data Scientist

Jul. 2018 - Sep. 2018

- o Oversaw development of a resource reallocation MIP model to optimize Immigration Judge (IJ) caseloads and shorten case times.
- o Implemented a PoC IJ scheduling optimization (IP) designed to reduce rescheduled hearings for the Department of Justice (DOJ).

Staff Data Scientist / Modeling & Analysis Team Lead

Jan. 2017 - Jun. 2018

- o Formulated and implemented a multi-objective optimization model in MATLAB that presents leadership with tradeoffs between operational and budgetary objectives through sets of pareto-optimal resource allocations.
- o Model endorsed by Department of Homeland Security (DHS) and awarded a DHS funded Winter Study.

Mindshare

Sep. 2015 - Dec. 2016

- o Led implementation of probabilistic forecasts to inform risk-oriented budgeting that prevented over-appropriation.
- o Utilized NLP, clustering, queuing simulation, and other techniques in R and Python on ad-hoc projects influencing client strategy.

Data Analytics Intern

New York, NY

*Jun.* 2014 - May 2015 o Developed attribution models to influence media spend and visualized twitter word-brand associations with NLP techniques.