#### **Trisha Singh**

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**SUMMARY** I studied and conducted research in Math and Economics at Middlebury College and am starting my MS in Statistics from Stanford University. Post college, I worked at Analysis Group, where I built apps and conducted statistical analysis to solve unique litigation and healthcare problems.

WORK INTERESTS Machine learning, natural language processing, causal inference

#### **EDUCATION**

Stanford University
M.S., Statistics
Stanford, California
(incoming September 2019)
Middlebury College
Middlebury, Vermont

B.A., Double major: Economics and Mathematics

(September 2014 to May 2018)

- Cumulative GPA: 3.8/4.0, Economics GPA: 4.0/4.0, Math GPA: 3.8/4.0
- Relevant coursework: Machine Learning, Stochastic Processes, Theory of Statistics, Data Structures, Data Science, Probability, Linear Algebra & Differential Equations

#### RELEVANT WORK EXPERIENCE

Analysis Group Boston, MA

Analyst | Litigation and Biostatistics Research May-June 2017, September 2018-May 2019 (11 months)

- Litigation: conducted profit-loss analyses on mortgage backed security loans; sped up data cleaning by 80 percent using Python's NLTK library to clean securities data and track sales
- Healthcare: created cost effectiveness analysis app in R Shiny for leading pharmaceutical companies; analyzed drug trial data for publication
- Leadership: Trained 150 analysts across 6 offices in data analysis and natural language processing in Python; created and led algorithm design workshop for all healthcare analysts in Boston

Middlebury, VT

Research Assistant | Economics Department

March 2017-May 2018 (1 year)

- Analyzed the effect of deforestation on malaria prevalence and economic outcomes in Nigeria
- Created a tool in ArcPy (ArcGIS and Python) to help economists summarize geographic data

# **Evidence for Policy Design, Harvard Kennedy School**

New Delhi, India

Research Intern

May-August 2016 (3 months)

 Worked with a team of development economists to formulate, implement, and then analyze a randomized controlled trial in rural parts of India in three different states

#### Center for Teaching, Learning, and Research

Middlebury, VT

Quantitative Tutor and Teacher's Assistant | Statistics and Economics March 2015-May 2016 (1.5 years)

Explained data visualization and inference to students across disciplines using R and STATA

## SELECTED INDEPENDENT PROJECTS

## **Machine Learning Project**

Predicting Energy Consumption using Time Series Data

• Trained a convolutional neural network to predict energy consumption of a building for the next week using historical consumption data, predicted consumption with only a 5% error on the test set

#### **Statistics Research Paper**

Causal Teamwork: Regression and Matching as Supplements in the estimation of Causal Effects

- Studied graduate level causal analysis concepts to compare the performance of non-parametric regression techniques using Monte Carlo simulations
- Awarded \$5000 by Math department to attend professional epidemiology seminar by StatHorizons

# RELEVANT SKILLS AND INTERESTS

• Languages/technologies: Proficient in Python, R, SAS, STATA, QGIS; familiar with Java, MATLAB.

• Organizations: Student Government Association (served in leadership roles for 4 years), Volunteer at Charter House Coalition (non-profit food and shelter house), Volunteer Services Organization

## **AWARDS AND HONORS**

- Summa Cum Laude
- Highest Honors in Economics, F.C. Dirks Prize in Economics, High Honors in Mathematics
- College Scholar: Highest academic honor for semester GPA above 3.6 March 2015-May 2018
- **BOLD Scholar:** \$25,000 p.a. scholarship for academic excellence September 2016-May 2018