# JESSICA SPENCER

Mobile: (845) 772-1340 • jesspencer3@gmail.com • github.com/jessica-spencer/

#### **EDUCATION**

**NEW YORK UNIVERSITY,** New York, NY

Masters of Science

Applied Statistics in Social Science Research, Steinhardt School

**Concentration:** Data Science for Social Good

Coursework Includes: Multilevel Modeling, Generalized linear modeling, Multivariate Analysis, Causal Inference, Messy Data and Machine Learning, Surveys, Statistical Consulting Seminar and Practicum, Data Ethics, Data Science Communication and

Translation, Qualitative Research Design

**CONNECTICUT COLLEGE,** New London, CT

BA with distinctions May 2017

Majors: Computer Science and American Studies: Politics, Policy and Society

### RELEVANT LANGUAGES AND TECHNOLOGIES

SOL · Python · R and R Studio · Power BI · Amazon Sagemaker

#### WORK EXPERIENCE

DTCC, Data Services, Jersey City, NJ

Spring 2020-present

Data Scientist

- Engineer and maintain a suite of cross-asset data products that offer market insights using SQL/Snowflake
- Establish ways of working within our new data science team standardize our research and documentation methods, decide how we engage with our partners, and more
- Test hypotheses on sensitive financial data, both structured and unstructured, from internal sources, and external sources such as social media. Answer business questions about these data using statistical and data science techniques including linear regression, multi-level modeling, sentiment analysis, and topic modeling
- Visualize data exploration and findings in either python, or PowerBI for presentation or ongoing use
- Present research findings to audiences with varying levels of data fluency, communicate results and suggest solutions and/or next steps
- Manage, store, mine, update and clean data for beta testing, and support testing in ensuring data confidentiality is maintained
- Assess and advise the company on online data solutions and tools

DTCC Education Initiatives, DTCC, Jersey City, NJ

Spring 2020-present

Educator

· Design, organize and deliver educational workshops on data science, data analysis, and new technologies for both our student groups, Star Coders and Girls Who Code, and our employee further education groups, the Data Analytics User Group and Innovation Council

## SELECTED PROJECTS AND RESEARCH

Gender Equality in Orchestra Pits, with Professors Ana Zuim and Talitha Fehr at the NYU Steinhardt School

• Designed and led the a research project to explore the relationship between gender and opportunity for Broadway Musicians using R Studio to analyze and create informative visualizations

Consulting: Integrated Species Distribution Model of the Sumatran Tiger, Statistical Consulting Seminar at NYU

- Proof of Concept for NASA-sponsored project to map worldwide species presence for tigers with a team of researchers from the Wildlife Conservation Society
- Mapped the spatial distribution of tigers across the island of Sumatra using novel methods: a presencebackground model - which uses records of where the tigers were, and a presence-absence model- made from camera traps, that includes both presence and absence data, which were then combined

## RELEVENT VOLUNTEER EXPERIENCE

Crime Victims Treatment Center, New York, NY

November 2022 - present

Advocacy Volunteer • volunteering as a rape crisis and domestic violence advocates to provide crisis counseling, emotional support and advocacy to survivors of sexual and intimate partner violence who seek treatment in the emergency departments of our affiliate hospitals

NYCLU, New York, NY Spring 2020-present

Protest Monitor

• Help document and monitor police activity at protests across New York City