# DANIEL ZEIBERG

zeiberg.d@northeastern.edu \( \display (609) \) 410-5967 \( \display \) linkedin.com/in/danielzeiberg \( \display \) dzeiberg.github.io

#### **EDUCATION**

PhD in Computer Science

2018 - Present

Northeastern University, Boston, MA

GPA: 4.0/4.0

Relevant Courses: Advanced Machine Learning, Statistical Inference, Data Visualization

Bachelor of Science in Engineering, Computer Science

2014 - 2018

University of Michigan, Ann Arbor, MI

GPA: 3.83/4.0

Minor in Statistics

Graduated summa cum laude from Engineering Honors College

Relevant Courses: Machine Learning, Artificial Intelligence, Natural Language Processing, Theoretical Statistics,

Applied Regression

## **EXPERIENCE**

# Graduate Research Assistant

January 2019 - Present

Northeastern University, Advised by Predrag Radivojac

Boston, MA

- · Developed a deep learning model for class prior estimation for positive-unlabeled data using Tensorflow
- · Researching heterogeneous graph-based models for compound protein interaction prediction using Keras
- · Leveraged computer clusters and parallelism to quickly process large high-dimensional datasets

# **Advanced Machine Learning Course Project**

January - May 2019

Northeastern University

Boston, MA

- · Evaluated the utility of natural language processing techniques in lyric-based song genre prediction
- · Compared state of the art neural topic models to Word2Vec and TF-IDF in learning song representations

## Graduate Research Assistant

September - December 2018

Northeastern University, Advised by Rose Yu

Boston, MA

- · Developed deep sequence-to-sequence models using Pytorch that forecast spatiotemporal data
- · Achieved prediction accuracy on-par with published methods for next hour traffic speed forecasting

#### Undergraduate Research Assistant

May 2017 - July 2018

University of Michigan, Advised by Jenna Wiens

Ann Arbor, MI

- · Developed a model that uses electronic health records to risk stratify hospital patients for Acute Respiratory Distress Syndrome
- · Demonstrated our model's ability to allow doctors to avoid time intensive manual chart review

#### PUBLICATIONS AND AWARDS

- · Zeiberg D et al. Fast nonparametric estimation of class proportions in the positive-unlabeled classification setting. AAAI-2020
- · Zeiberg D, Prahlad T et al. Machine learning for patient risk stratification for acute respiratory distress syndrome. PLOS ONE (2019)
- · Lugo-Martinez J, Zeiberg D, Gaudelet T, Malod-Dognin N, Przulj N, Radivojac P. Classification in biological networks with hypergraphlet kernels. Bioinformatics (2020)
- · Most Likely To Have Transformative Scientific Impact Award MIDAS Symposium

October 2017

## TECHNICAL STRENGTHS

Computer Languages Software & Tools Python, C/C++, MATLAB, R, Java

Tensorflow, Pytorch, Keras