Stephanie Ger

School: *Northwestern University 633 Clark Street, Evanston, IL 60208* stephanieger@u.northwestern.edu
Permanent: *6445 N. Greenview Ave Apt 1, Chicago, IL 60626* 860-305-2967

Education

Northwestern University — Evanston, IL *Fall 2014-present*

- Doctoral Candidate in Engineering Sciences and Applied Mathematics advised by Diego Klabjan
- MS in Engineering Sciences and Applied Mathematics (Spring 2015)
- NSF Graduate Research Fellowship (Summer 2015 - Spring 2018)
- Relevant coursework includes Deep Learning, Machine Learning, Stochastic Processes, High Performance Computing, Optimization 2, Big Data

Boston College — Chestnut Hill, MA *Fall 2010-Spring 2014*

- BA in Mathematics

Current Projects

Anomaly Detection on Temporal Data — in collaboration with industry partner *Spring 2017-Fall 2018*

- Developed algorithms for synthetic data generation in order to improve classification accuracy for recurrent models on multivariate temporal data using Tensorflow and Keras.

Predicting Customer Churn — in collaboration with industry partner *Fall 2017-present*

- Working to build explainable recurrent models with Keras to accurately predict and prevent customer churn.

Sequences with Equal Time Events — in collaboration with industry partner *Spring 2018-present*

- Working to build a recurrent model for partially ordered timeseries data.

Experience

Bioinformatics Summer Intern at Ancestry — San Francisco, CA *Summer 2018*

- Built a neural network based model to predict traits such as male pattern baldness from genomic data.

Summer Undergraduate Laboratory Internship at Lawrence Berkeley National Laboratory — Berkeley, CA *Summer 2014*

- Built a web application using PHP and Python to demonstrate the effects of statistical overfitting and backtest overfitting on trading algorithms to disseminate information to the general public.

Summer@ICERM — Providence, RI *Summer 2013*

- Conducted research on the presence of periodic patterns in the outer billiard problem at the Institute for Computational and Experimental Research in Mathematics at Brown University.

Undergraduate Research Fellowship — Chestnut Hill, MA *Summer 2012*

- Conducted research on the model dynamics of systems of neurons using analytical and numerical tools.

Skills

- Experienced with Keras, Tensorflow, Python (NumPy, SciPy), C, PHP, Matlab, R, HTML, LaTeX
- Conversant with Mac OS X, Windows, and UNIX systems.
- Familiar with Git, Vim & Emacs

Interests

data analysis and visualization, optimization and machine learning, deep learning, anomaly detection, algorithm design, scientific computing, computational biology