CONGZHENG SONG

Curriculum Vitae

Last Updated: 1st February, 2017

CONTACT

301 Gates Hall

Cornell University

Ithaca, NY, 14850

(678)–882–8741

cs2296@cornell.edu

http://csong27.github.io

EDUCATION

Cornell University, Ithaca, NY   2016 − Present
  PhD student in Computer Science
  Research Interests: Security and Privacy in Machine Learning

Emory University, Atlanta, GA   2012 − 2016
  Bachelor of Science in Computer Science with Highest Honor
  Thesis: *Using Deep Recurrent Neural Networks to Estimate Influenza Prevalence from Mobile Phone Records*

PUBLICATIONS

1. Safoora Yousefi, **Congzheng Song**, Nelson Nauata, Lee Cooper. *Learning Genomic Representations to Predict Clinical Outcomes in Cancer.* In *International Conference on Learning Representation Workshop* (ICLR), San Juan, Puerto Rico, 2016.

2. Erik Reinertsen, Niclas Palmius, **Congzheng Song**, Leon Danon, Gudrun Saemundsdottir, Olafur Magnusson, Gari D Clifford, Ymir Vigfusson. *Mobile Phone Activity and Population Movement During an Influenza A (H1N1) Outbreak in Iceland.* In *Sleep Medicine and Chronobiology Summer Schools Poster Session,* Oxford, UK, 2015.

RESEARCH EXPERIENCE

Graduate Research Assistant   2016 − Present
Department of Computer Science, Cornell University   Adviser: Prof. Vitaly Shmatikov
∞ Exploring privacy leakage in machine learning models.

Undergraduate Research Assistant   2015 − 2016
Department of Math & CS, Emory University   Adviser: Prof. Ymir Vigfusson
∞ Extracted a set of metrics to describe human behavior from mobile phone records.
∞ Developed a deep learning model for individual sickness prediction given behavioral features.

Undergraduate Research Assistant   2015 − 2016
Department of Bioinformatics, Emory University   Adviser: Prof. Lee Cooper
∞ Developed a neural network combining with Cox regression for survival analysis.
∞ Applied covolutional neural network in cancer cell image classification.

Undergraduate Research Intern   Summer 2015
Department of Computer Science, UC Irvine   Adviser: Prof. Sharad Mehrotra
∞ Developed a web framework for collecting, querying and visualizing sensor data.
∞ Involved in implementing backend server modules to handle user's request for processing sensors' data on multiple platforms.

Teaching Experience

Graduate Teaching Assistant   Fall 2016
CS 3410: Computer System Organization and Programming   Instructor: Prof. Anne Bracy

Undergraduate Lab Teaching Assistant   Fall 2013
Chem 141: General Chemistry I   Instructor: Prof. Karl Hagen

Awards

∞ Trevor Evans Award   2016

∞ Deborah Jackson Award   2015

∞ Dean's List   2012 – 2016

Skills

Programming and Scripting Languages: Python, Java, C, JavaScript, HTML & CSS, LaTeX

Software and Tools: Tensorflow, Theano, Matlab, R studio, Node.js, MongoDB, PostgreSQL

Languages: Chinese (Native), English (Professional), Japanese (Basic)

Selected Coursework

Computer Science: Analysis of Algorithm, Bayesian Machine Learning, Advanced Programming Languages , Natural Language Processing, Data Mining, Artificial Intelligence, Theory of Computing, Discrete Structures, Competitive Programming, Computer Security

Mathematics: Probabilities and Statistics, Partial Differential Equations, Numerical Analysis, Optimization Theory, Ordinary Differential Equations, Linear Algebra