# Edgar Xi

# Curriculum Vitae

## Personal Information

Address 5553 Beeler St, Pittsburgh, PA 15217, USA.

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## Education

2015-2019 Carnegie Mellon University, Pittsburgh, PA.

B.S., Machine Learning, Statistics.

## Research Interests

- Machine Learning methods for infrastructure analysis
- Stochastic regularization methods for neural networks
- Interpretability of nonlinear classifiers in medical diagnosis settings
- Knowledge representation with semi-supervised learning algorithms
- NLP analysis of EHR records

## **Research Experience**

November University of Pittsburgh, Prof Kayhan Batmanghelich

Present

Probabilistic Graphical Modeling, Medical imaging, Bioinformatics

August 2017

January 2017- Carnegie Mellon University, Prof. Zico Kolter

Machine Learning, Transportation & Mobility

January 2017- Carnegie Mellon University, Prof. Min Xu

May 2017

Deep Learning & Computational Biology

October Carnegie Mellon University, Prof. Anind Dev 2016-January Applied Machine Learning & Human-Computer Interaction 2017 **Publications** Dec 2017 Xi, E., Bing, S., Jin, Y. "Capsule Network Performance on Complex Data" in preprint. arXiv:1712.03480 Bhatt, U., Xi, E., Mani, S., Kolter, J. "Intelligent Pothole Detection and Road Oct 2017 Condition Assessment" in DSSG@UChicago, 10 Oct 2017 arXiv:1710.02595 **Talks** October 2017 Bloomberg: Data for Good Exchange (Selected presenter). *Mobility, Training,* & Cities September University of Chicago: Data Science Conference for Social Good. (Selected speaker) Short Talks: Case Studies July 2017 University of San Francisco: Data Science Annual Conference (Invited presenter) Research Projects March 2017 Expectation-Maximization Variant of Principle-Components-Analysis January 2017 SVM's for assessing road conditions from smartphone sensor data October 2016 Heatmap based methods for predicting stress from smartphone usage Industry Experience January 2017 Technical Cofounder & Lead Data Scientist, Percepsense - Present May-Sep Machine Learning Engineering Intern, Curb.ai 2017 May-August Software Engineering Intern, iTravelBuy 2016 Skills Languages Python, Java, R, Matlab, C/C++, MySQL, Julia, LATEX

Frameworks Pytorch, Tensorflow, Keras, Pandas, Scikit-learn, Django, AWS Systems Linux, OSX

# Coursework (graduate)

Fall 2017 Deep Learning (10-707) R. Salakhutdinov

Fall 2017 Modern Regression (36-607) L. Wasserman

Spring 2017 Machine Learning (10-601) M. Gormley

## Coursework (undergraduate)

Fall 2017 Statistical Computing (36-350)

Spring 2017 Neural Computation (15-386)

Spring 2017 Statistical Inference (36-226)

Fall 2016 Data Science (15-388)

Fall 2016 Calculus in 3 Dimensions (21-259)

Fall 2016 Probability Theory (36-225)

Spring 2016 Matrix Theory (21-241)

Fall 2015 Principles of Computation (15-122)

Fall 2015 Discrete Math (21-127)

## Grants, Honors & Awards

National Science Foundation, I-Corps site team Carnegie Mellon University, SURG Research Grant Project Olympus, Spark Award

#### References

## Dr. Zico Kolter, Ph.D

Assistant Professor
Machine Learning Department
Carnegie Mellon University
Pittsburgh, PA

zkolter@cs.cmu.edu

## Robb Myer, MBA

Entrepreneur in Residence Tepper School of Business Carnegie Mellon University Pittsburgh, PA

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