Edgar Xi

Curriculum Vitae

Personal Information

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Education

2015-2019 Carnegie Mellon University, Pittsburgh, PA.

B.S., Machine Learning, Statistics.

Research Interests

- o 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

o Probabilistic Graphical Modeling, Medical imaging, Bioinformatics Present

January 2017- Carnegie Mellon University, Prof. Zico Kolter August 2017

Machine Learning, Transportation & Mobility

January 2017- Carnegie Mellon University, Prof. Min Xu May 2017

Deep Learning & Computational Biology

	Carnegie Mellon University, Prof. Anind Dey
2016-January 2017	Applied Machine Learning & Human-Computer Interaction
	Publications
Oct 2017	Bhatt, U., Xi, E. , Mani, S., Kolter, J. "Intelligent Pothole Detection and Road Condition Assessment" in DSSG@UChicago, 10 Oct 2017 arXiv:1710.02595
	Talks
October 2017	Bloomberg: Data for Good Exchange (Selected presenter). <i>Mobility, Training, & Cities</i>
•	University of Chicago: Data Science Conference for Social Good. (Selected speaker) <i>Short Talks: Case Studies</i>
July 2017	University of San Francisco: Data Science Annual Conference (Invited presenter)
	Research Projects
Nov 2017	Capsule Network Performance on Complex Data
March 2017	Capsule Network Performance on Complex Data
March 2017 January 2017	Capsule Network Performance on Complex Data Expectation-Maximization Variant of Principle-Components-Analysis
March 2017 January 2017	Capsule Network Performance on Complex Data Expectation-Maximization Variant of Principle-Components-Analysis SVM's for assessing road conditions from smartphone sensor data
March 2017 January 2017 October 2016	Capsule Network Performance on Complex Data Expectation-Maximization Variant of Principle-Components-Analysis SVM's for assessing road conditions from smartphone sensor data Heatmap based methods for predicting stress from smartphone usage
March 2017 January 2017 October 2016 January 2017 - Present	Capsule Network Performance on Complex Data Expectation-Maximization Variant of Principle-Components-Analysis SVM's for assessing road conditions from smartphone sensor data Heatmap based methods for predicting stress from smartphone usage Industry Experience
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Frameworks Keras, Tensorflow, Pytorch, 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

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

Robb Myer, MBA

Entrepreneur in Residence Tepper School of Business Carnegie Mellon University Pittsburgh, PA ruther44@gmail.com