Gregory Plumb

gdplumb@andrew.cmu.edu

Education

Graduate Institution (Ph.D.): Carnegie Mellon University - Fifth Year
Undergraduate Institution: University of Wisconsin-Madison **GPA:** 3.95
Majors: Computer Science with Honors Mathematics with Honors

Publications

- Valerie Chen, Jeffrey Li, Joon Sik Kim, Gregory Plumb, Ameet Talwalkar. *Interpretable Machine Learning: Moving from mythos to diagnostics.* ACM Queue 2022. [Link]

- Valerie Chen, Gregory Plumb, Nicholay Topin, Ameet Talwalkar. *Simulated User Studies for Explanation Evaluation.* XAI4Debugging@NeurIPS2021. [Link]

- Jeffrey Li, Vaishnavh Nagarajan, Gregory Plumb, Ameet Talwalkar. *A learning Theoretical Perspective on Local Explainability.* ICLR 2021. [Link]

- Gregory Plumb, Maruan Al-Shedivat, Eric Xing, Ameet Talwalkar. *Regularizing Black-box Models for Improved Interpretability.* NeurIPS 2020. [Link]

- Gregory Plumb, Jonathan Terhorst, Sriram Sankararaman, Ameet Talwalkar. *Explaining Groups of Points in Low-Dimensional Representations.* ICML 2020. [Link]

- Gregory Plumb, Denali Molitor, Ameet Talwalkar. *Model Agnostic Supervised Local Explanations.* NeurIPS 2018. [Link]

- Gregory Plumb, Lindsay Clark, Sterling C. Johnson, Vikas Singh. *Modeling Cognitive Trends in Preclinical Alzheimer's Disease (AD) via Distributions over Permutations.* MICCAI 2017. [Link]

- Gregory Plumb, Deepti Pachauri, Risi Kondor, Vikas Singh. *SnFFT: A Julia Toolkit for Harmonic Analysis on the Symmetric Group.* Journal of Machine Learning Research: Machine Learning Open Source Software (JMLR MLOSS 2015). [Link]

Preprints

- Gregory Plumb, Marco Tulio Ribeiro, Ameet Talwalkar. *Finding and Fixing Spurious Patterns with Explanations.* [Link]

- Joon Sik Kim, Gregory Plumb, Ameet Talwalkar. *Sanity Simulations for Saliency Methods.* [Link]

Awards

- Winner of the 2015 Dewitt Undergraduate Scholarship from the Department of Computer Sciences, University of Wisconsin-Madison (one award per year, $8000)

Internships

- Microsoft Research: Worked on a novel framework for identifying and correcting spurious correlations in image classifiers. (Summer 2020)

- Amazon: Developed a framework for visualizing and debugging parallel and distributed workflows. (Summer 2016)

- Carnegie Mellon University - Summer Undergraduate Research Experience in Statistics: Worked with fMRI data to identify regions of the brain involved with abstract reasoning. (Summer 2015)

- Clemetric: Developed a Machine Learning framework for determining the quality of streamed ECG data (Summer 2014) and to predict whether or not a patient in a hospital will enter septic shock (Summer 2017).