Gauri Jagatap

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Education

Aug 2016 -*Present*	Doctor of Philosophy (PhD) in Electrical Engineering **Iowa State University** GPA: 3.86/4
Aug 2010 -May 2015	Bachelor of Engineering (Hons.) in Electrical and Electronics Engineering Master of Science (Hons.) in Physics **BITS Pilani University**, India GPA: 8.69/10

Research Interests

Machine Learning, Statistical Learning, Learning Theory, Algorithms, Signal Processing, Optimization

Journal articles

Oct 2017	G. Jagatap and C. Hegde, "Phase Retrieval Using Structured Sparsity: A Sample Efficient Algorithmic Framework", *in preparation for* **IEEE Transactions in Information Theory** (arXiv preprint).

Conference proceedings

Dec 2017	G. Jagatap and C. Hegde, "Fast, Sample-Efficient Algorithms for Structured Phase Retrieval", *to appear in* **Advances in Neural Information Processing Systems (NIPS) 2017** (Acceptance rate: 20.93%).

Posters

Jun 2017	G. Jagatap and C. Hegde, "Fast and sample-efficient algorithms for structured phase retrieval", **Midwest Machine Learning Symposium (MMLS) 2017**.
Dec 2017	G. Jagatap and C. Hegde, "Phase Retrieval Using Structured Sparsity: A Sample Efficient Algorithmic Framework", **Women in Machine Learning (WiML) 2017 Workshop**.

Research

Aug 2016 -*Present*	PhD student at **Iowa State University** Advisor: Dr. Chinmay Hegde Phase retrieval using structured sparsity: utilizing underlying structure in signal data to develop fast and sample efficient algorithms for solving absolute valued inverse problems. Formulated and analyzed bounds on the number of sample points required for invertibility. Analyzed convergence criterion and running time of the algorithm. Applications to Fourier ptychographic experiments.
Jul 2015 -Jul 2016	Project Assistant at **Indian Institute of Science**, Bengaluru, India Advisor: Dr. CS Seelamantula Axial super-resolution of ultrasound images using compressed sensing.
Aug 2015	Low rank and sparse decomposition of compressively sensed video using Alternating Directions Method of Multipliers (ADMM).

Scholarships and Awards

Oct 2017	Student Travel Award for NIPS 2017
Aug 2016	Research Assistant
-Present	**Iowa State University**
Dec 2011	INSPIRE Scholarship
-May 2015	**Department of Science and Technology, Govt. of India**

Teaching Assistantships

Spring 2014	BITS C386:Quantum Information & Computing, **BITS Pilani University**
Fall 2012	PHY F110:Physics Laboratory, **BITS Pilani University**

Graduate Courses

Iowa State University
Data Analytics for ECpE, Deep Machine Learning, Statistical Machine Learning, Convex Optimization, Nonlinear Programming, Theory of Prob. and Stats., Applied Linear Algebra

Programming Skills

MATLAB, Python, C

Professional Activities

Technical reviewer, **Women in Machine Learning (WiML) 2017 Workshop**
Event coordinator, Data Science Reading Group, **Iowa State University**.