

# Gauri Jagatap

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## EDUCATION

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AUG 2016 -Present	Doctor of Philosophy (PhD) in ELECTRICAL ENGINEERING <b>Iowa State University</b> GPA: 3.86/4
AUG 2010 -MAY 2015	Bachelor of Engineering (Hons.) in ELECTRICAL AND ELECTRONICS ENGINEERING Master of Science (Hons.) in PHYSICS <b>BITS Pilani University, India</b> GPA: 8.69/10

## RESEARCH INTERESTS

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

## JOURNAL ARTICLES

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OCT 2017	G. Jagatap and C. Hegde, "Sample-efficient algorithms for recovering structured signals from magnitude-only measurements", <i>submitted to IEEE Transactions in Information Theory</i> ( <a href="#">arXiv preprint</a> ).
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## CONFERENCE PROCEEDINGS

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DEC 2017	G. Jagatap and C. Hegde, "Fast, sample-efficient algorithms for structured phase retrieval", <b>Advances in Neural Information Processing Systems (NIPS)</b> , pp. 4922-4932, 2017. (Acceptance rate: 20.93%).
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## POSTERS

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JUN 2017	G. Jagatap and C. Hegde, "Fast and sample-efficient algorithms for structured phase retrieval", <b>Midwest Machine Learning Symposium (MMLS) 2017</b> .
DEC 2017	G. Jagatap and C. Hegde, "Phase retrieval using structured sparsity: A sample efficient algorithmic framework", <b>Women in Machine Learning (WiML) 2017 Workshop</b> .

## RESEARCH

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AUG 2016 -Present	PhD student at <b>Iowa State University</b> 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 <b>Indian Institute of Science</b> , 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

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OCT 2017	Student Travel Award for NIPS 2017
Nov 2017	WiML 2017 Travel Grant
AUG 2016	Research Assistant
-Present	<b>Iowa State University</b>
DEC 2011	INSPIRE Scholarship
-MAY 2015	<b>Department of Science and Technology, Govt. of India</b>

## TEACHING ASSISTANTSHIPS

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SPRING 2014	BITS C386:QUANTUM INFORMATION & COMPUTING, <b>BITS Pilani University</b>
FALL 2012	PHY F110:PHYSICS LABORATORY, <b>BITS Pilani University</b>

## GRADUATE COURSES

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### **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

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MATLAB, Python, C

## PROFESSIONAL ACTIVITIES

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