Shalmali Joshi

Curriculum Vitae

Ph.D. Candidate
Electrical and Computer Engineering,
University of Texas at Austin

Affiliations:
 IDEA Lab, WNCG

Mail: 2501 Lake Austin Blvd, Apt J106
 Austin, TX 78703
Phone: (352) 328-8805
Email: shalmali@utexas.edu
Web: https://shalmalijoshi.github.io/
Lab: http://www.ideal.ece.utexas.edu/

Education

'13- Jun '18 (exp)	Ph.D., Electrical & Computer Engg	UT Austin (Advisor: Joydeep Ghosh)
'09-'11	M.S., Electrical & Computer Engg	UC, San Diego
'05-'09	B. Tech., Electrical Engg	Vishveshvaraya Natl. Inst. of Tech., India

Research Interests

Machine Learning, Data Science:
Machine Learning for Clinical Healthcare, Interpretability of Machine Learning models

Scientific products

Publications - Conference and Journal

1. **Shalmali Joshi**, Rajiv Khanna, and Joydeep Ghosh. Co-regularized monotone regtargeting for semi-supervised LeTOR. In *Siam International Conference on Data Mining (SDM) - to appear*, 2018

2. **Shalmali Joshi**, Suriya Gunasekar, David Sontag, and Joydeep Ghosh. Identifiable phenotyping using constrained Non-Negative matrix factorization. In *Machine Learning for Healthcare Conference*, pages 17–41. jmlr.org, 10 December 2016

3. **Shalmali Joshi**, Joydeep Ghosh, Mark Reid, and Oluwasanmi Koyejo. Rényi divergence minimization based co-regularized multiview clustering. *Mach. Learn.*, 104(2-3):411–439, 1 September 2016

4. **Shalmali Joshi**, Oluwasanmi Koyejo, Kristine Resurreccion, and Joydeep Ghosh. Simultaneous prognosis and exploratory analysis of multiple chronic conditions using clinical notes. In *2015 International Conference on Healthcare Informatics*, pages 243–252. ieeexplore.ieee.org, October 2015

Peer Reviewed Workshop/Abstracts

5. **Shalmali Joshi**, Been Kim, Oluwasanmi Koyejo, and Joydeep Ghosh. Through the looking GANs. In *Women in Machine Learning Workshop @ NIPS*, 2017

6. **Shalmali Joshi**, Oluwasanmi Koyejo, and Joydeep Ghosh. Simultaneous prognosis of multiple chronic conditions from heterogeneous EHR data. In *2015 International Conference on Healthcare Informatics*, pages 497–497. ieeexplore.ieee.org, October 2015

7. **Shalmali Joshi**, Oluwasanmi Koyejo, and Joydeep Ghosh. Multiview clustering via constrained bayesian inference. In *Workshop on Divergence Methods for Probabilistic Inference*, 2014

Manuscripts - In preparation

8. **Shalmali Joshi**, Been Kim, Oluwasanmi Koyejo, and Joydeep Ghosh. Through the looking GANs: Explaining black-box classifiers. 2018

9. **Shalmali Joshi** and Joydeep Ghosh. Identifiable phenotyping using implicit generative models. 2018

10. Rajiv Khanna, **Shalmali Joshi**, Alex Dimakis, and Joydeep Ghosh. Greedy feature selection with transformed features. 2018

Theses

11. (In preparation) **Shalmali Joshi**. *Constraint Based (Latent Variable) Approaches to Interpretable and Versatile Machine Learning*. PhD thesis, The University of Texas at Austin, December 2017

12. **Shalmali Joshi***, Aditya Mundle*, and Aishwarya Parthasarthy*. *Spike Sorting of Retinal Neural Responses*. B. Tech. thesis, Visvesvaraya National Institute of Technology, India, June 2009

*Equal Contribution.

Teaching experience (Teaching Assistant)

Fall '15	Advanced Predictive Modeling	McCombs School of Business, UT Austin
Fall '14	Graduate Data Mining	Electrical & Computer Engg., UT Austin
Spring '14	Graduate Data Mining	Electrical & Computer Engg., UT Austin

Work Experience

Summer '15	Technical Intern	**Yahoo! Labs**, Sunnyvale CA
June '13-June '15	Software Engineer	**Amazon Lab 126**, Sunnycale CA
Summer '10	HPC Algorithms Intern	**Life Technologies**, Carlsbad CA

Awards/Service

Program Committee

NIPS Workshop on Machine Learning for Health	2017

Ad-hoc peer review

WiML@NIPS (Women In Machine Learning)	2017
MLHC	2017
NIPS Workshop on Machine Learning for Health	2016
NIPS	2015
ICML	2015
TKDD	2014

Awards

2017	WiML@NIPS Travel Award
2015	IEEE ICHI Travel Award
2003	National Talent Search Scholarship, Govt. of India

Technical Skills

Programming/Scripting Languages	Python, C++, C, R, MATLAB, Perl, Bash, XML
Libraries, Tools, IDEs	Tensorflow, scikit_learn, numpy, scipy, openCV, vim, STL, Cvx, LibSVM, LaTeX, Qt Creator, RStudio, CUDA API, gcc, gdb
Versioning Tools	Git, svn
Operating Systems	OSx, Linux

References

Available upon request.