# Shalmali Joshi

## Curriculum Vitae

Ph.D. Candidate Mail: 2501 Lake Austin Blvd, Apt J106

Electrical and Computer Engineering,

Austin, TX 78703

University of Texas at Austin Phone: (352) 328-8805

Email: shalmali@utexas.edu

Affiliations: Web: https://shalmalijoshi.github.io/ IDEA Lab, WNCG Lab: http://www.ideal.ece.utexas.edu/

#### **Education**

'13- 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 Technology, India

#### **Research Interests**

## Machine Learning, Data Science:

Semi-supervised and Unsupervised Learning, Latent Variable Models, Learning to Rank (LETOR), Interpretability of Machine Learning models, Machine Learning for Clinical Healthcare.

# Scientific products

#### Publications - Conference and Journal

- 1. **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
- 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
- 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

#### Manuscripts - In preparation/submitted

- 4. **Shalmali Joshi**, Rajiv Khanna, and Joydeep Ghosh. Co-regularized monotone regtargeting for semi-supervised LETOR. 2017
- 5. Rajiv Khanna, **Shalmali Joshi**, Alex Dimakis, and Joydeep Ghosh. Greedy feature selection with transformed features. 2017
- 6. **Shalmali Joshi** and Joydeep Ghosh. Identifiable phenotyping using implicit generative models. 2017

Shalmali Joshi

#### **Theses**

7. (In preparation) **Shalmali Joshi**. *Constrained Latent Variable Models for Semi–Supervised Learning with Heterogeneous data*. PhD thesis, The University of Texas at Austin, December 2017

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

#### Peer Reviewed Workshop/Abstracts

- 9. **Shalmali Joshi**, Been Kim, Oluwasanmi Koyejo, and Joydeep Ghosh. Through the looking GANs. In *Women in Machine Learning Workshop @ NIPS*, 2017
- 10. **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
- 11. **Shalmali Joshi**, Oluwasanmi Koyejo, and Joydeep Ghosh. Multiview clustering via constrained bayesian inference. In *Workshop on Divergence Methods for Probabilistic Inference*, 2014

# 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	<b>Life Technologies</b> , Carlsbad CA

#### Awards/Service

#### Program Committee

NIPS Workshop on N	Machine Learning for Health	2017
--------------------	-----------------------------	------

#### Ad-hoc peer review

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

<sup>\*</sup>Equal Contribution.

Shalmali Joshi 3

#### Awards

2015 IEEE ICHI Travel Award

2003 National Talent Search Scholarship, Govt. of India

# **Technical Skills**

Programming/Scripting
Python, C++, C, R, MATLAB, Perl, Bash, XML

Languages

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.

Libraries, Tools, IDEs