Mike Wu

334 Jordan Hall (858) 740-9967 wumike@stanford.edu https://www.mikehwu.com

Education	Stanford University Ph.D. in Computer Science Advisor: Noah Goodman	2017 - Present
	Yale University, Hopper College B.S. with Distinction in Computer Science Yale college council, science committee	2012 - 2016
	University of Oxford, New College 1st mark in three courses in Computer Science Oxford computing society	2015
Awards and Honors	IDEO CoLab Fellow Google Cloud Platform education grant AngelHack, augmented reality category 1st place NSF Graduate Research Fellowship API World Hackathon, Telesign API 1st place Trueface.ai Hackathon, 1st place HackMIT Top 8 Hacks, Dropbox API 1st place Qualcomm QLiving university scholarship Intel ISEF semifinalist Siemens Competition semifinalist Intel ISEF finalist, 3rd place in Computer Science XSEDE best student poster	2019 2018 2018 2017 2017 2017 2015 2014 2012 2012 2011 2011

Conference and Journal Proceedings

Mike Wu, Noah Goodman, Stefano Ermon. Differentiable Antithetic Sampling for Variance Reduction in Stochastic Variational Inference. In *Proc. 22nd International Conference on Artificial Intelligence and Statistics* (AISTATS), 2019.

Mike Wu, Milan Mosse, Noah Goodman, Chris Piech. Zero Shot Learning for Code Education: Rubric Sampling with Deep Learning Inference. In *Proc. 33rd AAAI Conference on Artificial Intelligence* (AAAI), 2019. [Oral presentation (12 min).]

Mike Wu, Noah Goodman. Multimodal Generative Models for Scalable Weakly-Supervised Learning. *Proc. 32nd Annual Conference on Neural Information Processing Systems* (NeurIPS), 2018.

Mike Wu, Michael C. Hughes, Sonali Parbhoo, Maurizio Zazzi, Volker Roth, Finale Doshi-Velez. Beyond Sparsity: Tree Regularization of Deep Models for Interpretability. In *Proc. 32nd AAAI Conference on Artificial Intelligence* (AAAI), 2018. [Spotlight presentation (2 min).]

Marzyeh Ghassemi, **Mike Wu**, Michael C. Hughes, Finale Doshi-Velez. Predicting Intervation Onset in the ICU with Switching Statespace Models. In *Proc. AMIA*

Summit on Clinical Research Informatics (CRI), 2017. [Nominated for Best Paper.]

Mike Wu, Marzyeh Ghassemi, Mengling Feng, Leo Anthony Celi, Peter Szolovitz, Finale Doshi-Velez. Understanding Vassopressor Intervention and Weaning: Risk Prediction in a Public Heterogeneous Clinical Time Series Database. In *Journal of the American Medical Informations Association, Volume 24, Issue 3, No. 1* (JAMIA), 2016.

Mike Wu, Madhu Krishnan. Edge-based Crowd Detection from Single Image Datasets. In *International Journal of Computer Science Issues*, Volume 12, Issue 1, No. 1 (IJCSI), 2013.

Madhu Krishnan, **Mike Wu**, Young Kang, Sarah H. Lee. Autonomous Mapping and Navigation through Utilization of Edge-based Optical Flow and Time-to-Collision. In *ARPN Journal of Engineering and Applied Sciences, Volume 7, No. 12*, 2012.

Workshops

Mike Wu, Sonali Parbhoo, Finale Doshi-Velez. Beyond Sparsity: Tree Regularization of Deep Models for Interpretability. NeurIPS 2017 Workshop on Transparent and interpretable Machine Learning in Safety Critical Environments. [Contributed talk (10 min).]

Patents

Frank Wood, **Mike Wu**, Yura Perov, Hongseok Yang. Computing engine, software, system and method. US Patent App. 15/465,131, 2017.

Teaching Experience

Teaching Assistant, Dept. of Computer Science, Yale University Spring 2016 CPSC437: Operating System Concepts (Avi Silberschatz)

Teaching Assistant, School of Management, Yale University

MGT656: Management of Software Development (Kyle Jensen)

Invited Talks

Yale Technology Conference, Yale University, 2016.

Probabilistic Programming Workshop, University of Southampton, 2016.

Conference Presentations

Judith Fan, Robert X.D. Hawkins, **Mike Wu**, Noah Goodman. Modeling contextual flexibility in visual communication. *Vision Sciences Society Annual Meeting* (VSS), 2018.

William Smith, **Mike Wu**, Yura Perov, Frank Wood, Hongseok Yang. Spreadsheet probabilistic programming. *Inaugural International Conference on Probabilistic Programming*. (PROBPROG), 2018.

Industry Experience

Facebook Applied Machine Learning (AML)

2016-2017

Visiting engineer in Computer Vision.

Lattice Data
Software engineer.

Invrea (Inverse Reasoning)
http://invrea.com
Co-founder / engineer.

2015-2017

YHack	2013-2016
https://www.yhack.org	
Co-founder.	
Ionis Pharmaceuticals	2013

Data science Intern.