

## Mike Wu

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

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| <b>Education</b>                          | <b>Stanford University</b><br>Ph.D. in Computer Science<br>Advisor: Noah Goodman  | 2017 - Present |
|   | <b>Yale University</b> , Hopper College<br>B.S. with Distinction in Computer Science<br>Yale college council, science committee   | 2012 - 2016    |
|   | <b>University of Oxford</b> , New College<br>1st mark in three courses in Computer Science<br>Oxford computing society  | 2015           |
| <b>Awards and Honors</b>                  | IDEO CoLab Fellow   | 2019           |
|   | Google Cloud Platform education grant   | 2018           |
|   | AngelHack, augmented reality category 1st place   | 2018           |
|   | NSF Graduate Research Fellowship  | 2017           |
|   | API World Hackathon, Telesign API 1st place   | 2017           |
|   | Trueface.ai Hackathon, 1st place  | 2017           |
|   | HackMIT Top 8 Hacks, Dropbox API 1st place  | 2015           |
|   | Qualcomm QLiving university scholarship   | 2014           |
|   | Intel ISEF semifinalist   | 2012           |
|   | Siemens Competition semifinalist  | 2012           |
|   | Intel ISEF finalist, 3rd place in Computer Science  | 2011           |
|   | XSEDE best student poster   | 2011           |
| <b>Conference and Journal Proceedings</b> | <b>Mike Wu</b> , Noah Goodman, Stefano Ermon. Differentiable Antithetic Sampling for Variance Reduction in Stochastic Variational Inference. In <i>Proc. 22nd International Conference on Artificial Intelligence and Statistics (AISTATS)</i> , 2019.  |                |
|   | <b>Mike Wu</b> , Milan Mosse, Noah Goodman, Chris Piech. Zero Shot Learning for Code Education: Rubric Sampling with Deep Learning Inference. In <i>Proc. 33rd AAAI Conference on Artificial Intelligence (AAAI)</i> , 2019. [ <b>Oral presentation (12 min).</b> ] [ <b>Outstanding Student Paper Award.</b> ] |                |
|   | <b>Mike Wu</b> , Noah Goodman. Multimodal Generative Models for Scalable Weakly-Supervised Learning. <i>Proc. 32nd Annual Conference on Neural Information Processing Systems (NeurIPS)</i> , 2018.   |                |
|   | <b>Mike Wu</b> , Michael C. Hughes, Sonali Parbhoo, Maurizio Zazzi, Volker Roth, Finale Doshi-Velez. Beyond Sparsity: Tree Regularization of Deep Models for Interpretability. In <i>Proc. 32nd AAAI Conference on Artificial Intelligence (AAAI)</i> , 2018. [ <b>Spotlight presentation (2 min).</b> ]        |                |
|   | Marzyeh Ghassemi, <b>Mike Wu</b> , Michael C. Hughes, Finale Doshi-Velez. Predicting  |                |

Intervention 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 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 *ARPJ 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 Fall 2015  
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** 2016  
Software engineer.

**Invrea (Inverse Reasoning)** 2015-2017  
<http://invrea.com>

Co-founder / engineer.

**YHack**

<https://www.yhack.org>

Co-founder.

2013-2016

**Ionis Pharmaceuticals**

Data science Intern.

2013