Mike Wu

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Education

Stanford University 2017 - Present
Ph.D. in Computer Science
Advisor: Noah Goodman

Yale University, Hopper College 2012 - 2016
B.S. with Distinction in Computer Science
Yale college council, science committee

University of Oxford, New College 2015
1st mark in three courses in Computer Science
Oxford computing society

Awards and Honors

AAAI Outstanding Student Paper	2019
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

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).**] [**Outstanding Student Paper Award.**]

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 — Fall 2015
MGT656: Management of Software Development (Kyle Jensen)

Invited Talks

Stanford Computer Forum Annual Meeting, 2019.

Human-Centered Artificial Intelligence Institute Symposium, 2019.

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 2013-2016
`https://www.yhack.org`
Co-founder.

Ionis Pharmaceuticals 2013
Data science Intern.