

JULIUS ADEBAYO

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EDUCATION

PhD Student, Electrical Engineering and Computer Science
Massachusetts Institute of Technology, August 2018 - Present.

SM, Computer Science & Technology Policy (TPP)
Massachusetts Institute of Technology, 2013 - 2016.

Bachelor of Science, Mechanical Engineering
Minors: Computer Science & Mathematics
Brigham Young University, 2012.

SELECTED PAPERS

- **J. Adebayo**, M. Muelly, I. Liccardi, B. Kim. Debugging Tests for Model Explanations. *NeurIPS*, 2020.
- **J. Adebayo**, J. Gilmer, I. Goodfellow, M. Muelly, M. Hardt, B. Kim. Sanity Checks for Saliency Maps. Spotlight Paper at *NeurIPS*, 2018.
- Hurley, M., and **J. Adebayo**. "CREDIT SCORING IN THE ERA OF BIG DATA." *Yale Journal of Law & Technology*. 18 (2016): 148-275. <http://yjolt.org/credit-scoring-era-big-data>
- **J. Adebayo**, T. Southwick, V. Chetty, E. Yeung, Y. Yuan, J. Goncalves, J. Grose, G.B. Stan, S. Warnick. Dynamical Structure Function Identifiability Conditions Enabling Signal Structure Reconstruction. *Proceedings of the Conference on Decision and Control IEEE*, December 2011.

RESEARCH/WORK EXPERIENCE

Facebook Research. June 2021 - August 2021
(Research Intern)

- Studied the impact of label uncertainty on test fairness metrics for deep learning models.

Google Brain. July 2017 - July 2018
(AI Resident)

- Research on improving interpretability, security, and privacy of deep neural networks (DNNs).

Fast Forward Labs Inc. September 2016 - June 2017
(Research Engineer)

- Open-sourced python Cuckoo filter data structure for efficient streaming data processing, and developed (w/ team) an interpretability API.

Apple Inc. June 2016 - September 2016
(Data Science Intern)

- Deployed a time series anomaly detection package for monitoring internal metrics across all devices. Project was selected as one of the best intern projects, and presented the to SVP of Software engineering.

Data Science for Social Good, University of Chicago June 2014 - August 2014
(Data Science Fellow),

- Modeled maternal mortality at the municipality level in Mexico, and identified: prenatal care, cesarean section, and health insurance as the key factors driving high incidence.

New England Complex Systems Institute August 2012 - July 2013
Cambridge, MA (Research Analyst)

- Collected Twitter data to assess theories relating to spread of information in social networks, which resulted in publication in the journal on complexity.