OLAWALE SALAUDEEN

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APPOINTMENTS

Massachusetts Institute of Technology *September 2024 - Present*
Postdoctoral Associate, Electrical Engineering & Computer Science Cambridge, MA

EDUCATION

University of Illinois at Urbana-Champaign *August 2019 - August 2024*
Ph.D. Candidate in Computer Science, advised by Sanmi Koyejo Urbana, IL
Thesis: Towards Externally Valid Machine Learning: A Spurious Correlations Perspective

Stanford University *September 2022 - August 2024*
Visiting Ph.D. Student in Computer Science, hosted by Sanmi Koyejo Stanford, CA

Texas A&M University *August 2015 - May 2019*
Bachelor of Science with honors in Mechanical Engineering College Station, TX

REPRESENTATIVE PAPERS

* denotes equal contribution

3. **ImageNot: A Contrast with ImageNet preserves model rankings.** Olawale Salaudeen, Moritz Hardt. *Preprint. arXiv 2404.02112.*

2. **Causally Inspired Regularization Enables Domain General Representations.** Olawale Salaudeen, Oluwasanmi Koyejo. The International Conference on Artificial Intelligence and Statistics (AISTATS), 2024.

1. **Adapting to Latent Subgroup Shifts via Concepts and Proxies.** *Ibrahim Alabdulmohsin, *Nicole Chiou, *Alexander D'Amour, *Arthur Gretton, *Sanmi Koyejo, *Matt J. Kusner, *Stephen R. Pfohl, *Olawale Salaudeen, *Jessica Schrouff, *Katherine Tsai. The International Conference on Artificial Intelligence and Statistics (AISTATS), 2023.
Authors listed in alphabetical order.

REFEREED PUBLICATIONS

* denotes equal contribution

7. **Causally Inspired Regularization Enables Domain General Representations.** Olawale Salaudeen, Oluwasanmi Koyejo. The International Conference on Artificial Intelligence and Statistics (AISTATS), 2024.

6. **Proxy Methods for Domain Adaptation.** Olawale Salaudeen, Nicole Chiou, Matt J. Kustner, Alexander D'Amour, Sanmi Koyejo, Arthur Gretton. The International Conference on Artificial Intelligence and Statistics (AISTATS), 2024.

5. **Adapting to Latent Subgroup Shifts via Concepts and Proxies.** *Ibrahim Alabdulmohsin, *Nicole Chiou, *Alexander D'Amour, *Arthur Gretton, *Sanmi Koyejo, *Matt J. Kusner, *Stephen R. Pfohl, *Olawale Salaudeen, *Jessica Schrouff, *Katherine Tsai. The International Conference on Artificial Intelligence and Statistics (AISTATS), 2023.
Authors listed in alphabetical order.

4. **Addressing Observational Biases in Algorithmic Fairness Assessments.** Chirag Nagpal, **Olawale Salaudeen**, Sanmi Koyejo, Stephen Pfohl. Conference on Neural Information Processing Systems (NeurIPS), 2022. Workshop on Algorithmic Fairness through the Lens of Causality and Privacy (AFCP) *(extended abstract).*

3. **Adapting to Shifts in Latent Confounders using Observed Concepts and Proxies.** Matt J. Kusner, Ibrahim Alabdulmohsin, Stephen Pfohl, **Olawale Salaudeen**, Arthur Gretton, Sanmi Koyejo, Jessica Schrouff, Alexander D'Amour.
International Conference on Machine Learning (ICML), 2022. Workshop on Principles of Distribution Shift (PODS)

2. **Ultra-fast 3D fMRI to explore cardiac-induced fluctuations in BOLD-based functional imaging.** Brad Sutton, Aaron Anderson, Benjamin Zimmerman, Paul Camacho, Riwei Jin, Charles Marchini, **Olawale Salaudeen**, Natalie Ramsy, Davide Boido, Serge Charpak, Andrew Webb, Luisa Ciobanu. International Society for Magnetic Resonance in Medicine (ISMRM), 2022. *(abstract).*

1. **Exploiting Causal Chains for Domain Generalization. Olawale Salaudeen**, Sanmi Koyejo. Conference on Neural Information Processing Systems (NeurIPS), 2021. Workshop on Distribution Shifts – Connecting Methods and Applications (DistShift).

PREPRINTS

* denotes equal contribution

1. **ImageNot: A Contrast with ImageNet preserves model rankings. Olawale Salaudeen**, Moritz Hardt. *Preprint. arXiv 2404.02112.*

SELECTED INVITED TALKS AND PRESENTATIONS

6. Towards Externally Valid Evaluation of AI Systems
MobiliT.AI forum 2024
Shah Lab, Stanford University 2024

5. Learning Domain General Predictors
Simons Institute – Information-Theoretic Methods for Trustworthy Machine Learning 2023

4. Separating Neural Encoding and Decoding Pathways in fMRI by Disentangling Causal and Anticausal Mechanisms
University of Illinois at Urbana-Champaign Minitature Brain Machinery Retreat 2022

3. Denoising fMRI via probabilistic graphical model augmentation of ICA-AROMA
University of Illinois at Urbana-Champaign Beckman Institute Graduate Student Seminar 2022
University of Illinois at Urbana-Champaign Minitature Brain Machinery Retreat 2021

2. Automated Incorporation of Machine Learning (AIM)
Sandia National Laboratories MARTIANS End of Summer Symposia 2020

1. Interpretable Recurrent Convolutional Neural Networks for Cyber Alert Triaging
Sandia National Laboratories MARTIANS End of Summer Symposia 2019

SELECTED FELLOWSHIPS, HONORS, AND AWARDS

Research Trainee, *NSF Miniature Brain Machinery at UIUC* 2021
GEM Associate Fellow, *University of Illinois at Urbana-Champaign* 2021
Beckman Institute Graduate Fellow, *University of Illinois at Urbana-Champaign* 2020
Sloan Scholar, *Alfred P. Sloan Foundation's Minority Ph.D. (MPHD) Program* 2019
Masters Fellowship Program (declined), *Sandia National Laboratories* 2019

Mechanical Engineering Advisory Council Scholarship, *Texas A&M University* 2018
Foundation Excellence Award, *Texas A&M University* 2017
Pi Tau Sigma – Sigma Delta, *National Mechanical Engineering Honors Society* 2016
Craig and Galen Brown Honors College of Engineering, *Texas A&M University* 2015
Regents Scholar Program, *Texas A&M University* 2015

TEACHING

Data Visualization, Teaching Assistant – University of Illinois at Urbana-Champaign 2023
Foundations of Engineering – Python, Peer Teacher – Texas A&M University 2018-2019
Foundations of Engineering, Peer Teacher – Texas A&M University 2017-2018
Introduction to Microcontrollers, Co-Instructor – Sandia National Labs HMTech 2018, 2019

PREVIOUS EMPLOYMENT

Research Intern with *Dr. Moritz Hardt* 09/2023 - 01/2024
Max Planck Institute for Intelligent Systems Social Foundations of Computing *Tübingen, Germany*

Machine Learning Intern on Autonomous Vehicle Behaviors Summer 2023
Cruise LLC *San Francisco, CA*

Student Researcher with *Dr. Alex D'Amour* 05/2022 - 12/2022
Google Brain *Cambridge, MA*

R&D Intern with *Dr. Eric Goodman* 05/2017 - 04/2022
Sandia National Laboratories *Albuquerque, NM*

TEACHING AND MENTORSHIP

Uzma Hamid (LINXS @ Stanford University, Summer 2024)
Vikram Duvvur (Undergrad @ UIUC, 2021-2022), Next MS in Machine Learning @ CMU
Ahmed Elsayed (DREU @ UIUC, Summer 2021), Next Software Engineer at Microsoft

SELECTED SERVICE AND LEADERSHIP

Conference/Workshop Reviewer: NeurIPS 2022-24, ICML 2022-24 (*top 10% reviewer award*), AISTATS 2022, NeurIPS AFCP Workshop 2022, NeurIPS (BAI) Workshop 2021.

Conference/Workshop Area Chair: ICML TF2M 2024.

Journal Reviewer: JMLR 2023-24.

University of Illinois at Urbana-Champaign

Blacks, Indigenous, and Latinx in Tech (BUILT), Executive Board 2022 - 2024
Directed Reading Program, Mentor 2022 - 2024
Graduate Study Committee, 1 of 2 Graduate Student Members 2022
Broadening Participation in Computing, Engagement Subcommittee Member 2021 - 2022
Graduates Engineers Diversifying Illinois, Mentor 2020 - 2022
Distributed Research Experiences for Undergraduates (DREU) 2021
Institute for Inclusion, Diversity, Equity, and Access (IDEA), Affiliate Member 2020 - 2024

Texas A&M University

Craig and Galen Brown Engineering Honors Program, Executive Committee Chair 2018-2019
Texas A&M University Robotics Team and Leadership, President 2018-2019

Regents Scholarship Program, Mentor 2017-2019

External

The Institute for African-American Mentoring in Computing Sciences, Mentor 2023-Present