DYAH ADILA

Research Foundation Models, Robustness, Learning with limited data Interests Contact E-mail: adila@wisc.edu Information Website: dyahadila.github.io **EDUCATION** Ph.D. in Computer Science University of Wisconsin - Madison Sep 2021 - Present • Advisor: Fred Sala M.S. in Computer Science University of Minnesota - Twin Cities Sep 2019 - May 2021 • Advisor: Ju Sun B.Eng. Nanyang Technological University (NTU), Singapore Aug 2013 - Jun 2017 Conference & Dyah Adila*, C. Shin*, L. Cai, F.Sala, Zero-Shot Robustification of Zero-Shot Models, in Interna-JOURNAL tional Conference on Learning Representations (ICLR) 2024. [Paper] [Code] [Blog] **Publications** N. Roberts*, X. Li*, **Dyah Adila**, S. Cromp, B. Huang, J. Zhao, F. Sala, Geometry-Aware Adaptation for Pretrained Models, in Neural Information Processing Systems (NeurIPS), 2023. [Paper] C. Shin, S. Cromp, Dyah Adila, S., F. Sala, Mitigating Source Bias for Fairer Weak Supervision, in Neural Information Processing Systems (NeurIPS), 2023. [Paper] M. Chen*, D. Fu*, **Dyah Adila**, M. Zhang, F. Sala, K. Fatahalian, C. Ré, Shoring Up the Foundations: Fusing Model Embeddings and Weak Supervision, in Uncertainty in Artificial Intelligence (UAI), 2022. Oral presentation (best student paper runner-up). [Paper] [Code] N. Roberts*, X. Li*, B. Huang, **Dyah Adila**, S. Schoenberg, C. Liu, L. Pick, H. Ma, A. Albarghouthi, F. Sala, AutoWS-Bench-101: Benchmarking Automated Weak Supervision with 100 Labels, in Neural Information Processing Systems (NeurIPS), 2022. [Paper] Dyah Adila, C. Shin, L. Cai, F. Sala, Foundation Models Can Robustify Themselves, For Free, in Workshop **PUBLICATIONS** NeurIPS 2023 R0-FoMo. Oral presentation (best paper honorable mention). [Paper] Dyah Adila, S. Cromp, S. Mo, F. Sala, Causal Omnivore: Fusing Noisy Estimates of Spurious Correlations, in ICML 2022 Workshop on Spurious Correlations, Invariance, and Stability. [Paper] **Dyah Adila**, and Dongyeop Kang, Understanding Out-of-distribution: A Perspective of Data Dynamics, in NeurIPS 2021 Workshop: I Can't Believe It's Not Better!, PMLR 2022. [Paper] Awards Best paper award honorable mention at NeurIPS R0-FoMo 2023 ICCV DataComp winning team in small scale filtering track 2023 UAI Best Student Paper Runner-up 2022 EXPERIENCE University of Wisconsin-Madison, USA Aug 2021 - Present Research Assistant • Ph.D. research in Machine Learning advised by Fred Sala.

Amazon Web Services AI, USA
Applied Scientist Intern

• Designed attention steering method to mitigate cognitive and social bias in foundation models.

Sep 2023 - Dec 2023

University of Minnesota, USA

May 2020 - May 2021

Research Assistant

- Developed a rapid diagnostic model for COVID-19 in chest X-rays and built GAN for data augmentation to tackle class imbalance.
- Press coverage: [Link 1] [Link 2] [Link 3]

Traveloka, Indonesia

Jul 2017 - Jul 2019

Software Engineer

- Led the development of company-wide React Native user interface library (runs on Android and iOS), which speed up development time by 2x.
- Built Traveloka's customer-facing and business-facing mobile applications.

JPMorgan Chase, Singapore

May 2016 - Jul 2016

Software Engineer Intern

- Built a real-time log monitoring tool to keep track of daily transactions using Java.
- Built an API for multiple currency transfer application.

Seagate Technology, Singapore

Jan 2016 - May 2016

Research Engineer Intern

• Built a continuous integration framework to automate Seagate's build and test pipelines.

TECHNICAL SKILLS

- Competent: Python, PyTorch, TensorFlow, Java, Unix, Google Cloud Platform, JavaScript
- Familiar: SQL, AWS, Apache Spark