Skyler Seto

EDUCATION

Cornell University August 2014 - Present
P.H.D. in Statistics with Special Masters in Computer Science (tentative)
Massachusetts Institute of Technology September 2010 - June 2014
B.S. in Mathematics with Computer Science

RESEARCH INTERESTS

The goal of my research is to understand the limits of current machine learning systems, and to improve their reliability in the real world. I work on improving model robustness at all stages including dataset development, training algorithms, and fine-tuning pre-trained models.

WORK EXPERIENCE

Apple ML Research **Sep 2020 - Present**
∘ Developing methods for improving domain generalization of pre-trained models
∘ Developing better training algorithms and datasets for robustness
Apple AI Research **May 2019 - Dec 2019**
∘ Developed efficient algorithms for transfer learning and domain adaptation
Toyota and Tohoku University **June 2018 - August 2018**
∘ Developed MIP models for e-Palette passenger travel routing and pricing
Amazon Alexa Speech and ML Group **May 2017 - August 2017**
∘ Experimented with neural architectures for text normalization and tokenization
Riot Games Data Science Team **May 2016 - August 2016**
∘ Used online time series forecasting models to detect network connection anomalies
MIT Anyscale Learning For All Group **May 2015 - August 2015**
∘ Built tools and models for car destination prediction and trip signal forecasting

PUBLICATIONS

Selected Projects **Sep 2020 - Present**
∘ *Maini, P.,* ***Seto, S.****, et al. (2023). Rephrase not Repeat: Improving Language Model Training with High Quality Synthetic Data. Under Review.*
∘ ***Seto, S.****, Theobald, B. J., et al. (2023). REALM: Robust Entropy Adaptive Loss Minimization for Improved Single-Sample Test-Time Adaptation. In Winter Conference on Applications of Computer Vision (WACV).*
∘ *Sarabia, M., Menyaylenko, E., Toso, A.,* ***Seto, S.****, et al. (2023). Spatial LibriSpeech: An Augmented Dataset for Spatial Audio Learning. In Interspeech.*
∘ *Yan, B.*,* ***Seto, S.****, Apostoloff, N. (2022). FORML: Learning to Reweight Data for Fairness. In ICML DataPerf.*
∘ ***Seto, S.****, Wells, M. T., and Zhang, W. (2021). Halo: Learning to prune neural networks with shrinkage. In SIAM International Conference on Data Mining (SDM).*
∘ *Zhang, W.,* ***Seto, S.****, and Jha, D. K. (2020). CAZSL: Zero-Shot Regression for Pushing Models by Generalizing Through Context. In International Conference on Intelligent Robots and Systems (IROS).*

SOFTWARE

Programming Languages: Python, R, MATLAB
Deep Learning Frameworks: PyTorch
Technology: Git, SQL

RECENT SERVICE

ACADEMIC REVIEWING: FAccT 2023, ICML 2023, NeurIPS 2023, ICLR 2023
OTHER: Apple AI/ML Scholar Fellowship Reviewer and Mentor (2022-2024)

ADVISING

Interns: Bobby Yan (Stanford), Akshay Mehra (Tulane), Pratyush Maini (CMU)
AI/ML Scholar: Yong Lin (HKUST)