KUNIAKI SAITO

keisaito@bu.edu Homepage

EDUCATION

Boston University

PhD student

Boston, USA September 2018

• Focus on research of domain adaptation for image recognition; image classification, semantic segmentation and object detection, advised by Professor Kate Saenko.

The University of Tokyo

Master of Information Science and Technology

- GPA: 3.82
- Focus on computer science, particularly machine learning and computer vision; took classes on advanced statistical modeling, mechanisms of intelligence, and intelligence information

Boston University

Visiting Student, Vision & Language Group, Dept. of Computer Science

- Advised by Professor Kate Saenko on Domain Adaptation
- Participated in research on domain adaptation (See publication 5)

Bachelor Engineering (focused on Computer Vision)

- GPA: 3.47; Thesis: Semi-supervised Bayesian Canonical Correlation Analysis
- Member of Kendo club; practiced daily for 2 hours; won first prize in inter-university contest (2014)

RESEARCH ACTIVITIES

Domain Adaptation (DA), Open-World Recognition, Visual Question Answering (VQA), Vision-Language Model

INDUSTRY EXPERIENCE

- NVIDIA Research Intern 2019 summer
- Facebook Reality Lab Intern 2021 summer
- Google Cloud AI Intern 2022 winter
- Google Cloud AI student researcher 2022 summer-present

PUBLICATIONS AND PRESENTATIONS

Publications

- [1] "Prefix Conditioning Unifies Language and Label Supervision", Kuniaki Saito, Kihyuk Sohn, Xiang Zhang, Chun-Liang Li, Chen-Yu Lee, Kate Saenko, Tomas Pfister, Arxiv 2022
- [2] "Learning to Detect Every Thing in an Open World", Kuniaki Saito, Ping Hu, Trevor Darrell, and Kate Saenko, ECCV 2022
- [3] "OpenMatch: Open-set Consistency Regularization for Semi-supervised Learning with Outliers", Kuniaki Saito, Donghyun Kim, and Kate Saenko, Neurips 2021
- [4] "CDSP: Cross-domain Self-supervised Pre-training", Donghyun Kim, Kuniaki Saito, Tae-Hyun Oh, Bryan A. Plummer, Stan Sclaroff and Kate Saenko, ICCV2021
- [5] "Tune it the Right Way: Unsupervised Validation of Domain Adaptation via Soft Neighborhood Density", **Kuniaki Saito**, Donghyun Kim, Piotr Teterwak, Stan Sclaroff, Trevor Darrell, and Kate Saenko, **ICCV 2021**
- [6] "OVANet: One-vs-All Network for Universal Domain Adaptation", Kuniaki Saito and Kate Saenko, ICCV 2021
- [7] "Universal domain adaptation through self-supervision", Kuniaki Saito, Donghyun Kim, Stan Sclaroff and Kate Saenko, NeurIPS 2020
- [8] "COCO-FUNIT: Few-Shot Unsupervised Image Translation with a Content Conditioned Style Encoder", Kuniaki Saito, Kate Saenko and Ming-Yu Liu, ECCV 2020
- [9] "Semi-supervised Domain Adaptation via Minimax Entropy", **Kuniaki Saito**, Donghyun Kim, Stan Sclaroff, Trevor Darrell and Kate Saenko, **ICCV 2019**

Tokyo, Japan March 2018

Boston, USA July-September 2017

March 2016

- [10] "TWINS: Two Weighted Inconsistency-Reduced Network for Partial Domain Adaptation", **Kuniaki Saito***, Toshihiko Matsuura* and Tatsuya Harada, Arxiv
- [11] "Strong-Weak Distribution Alignment for Adaptive Object Detection", Kuniaki Saito, Yoshitaka Ushiku, Tatsuya Harada and Kate Saenko, CVPR 2019
- [12] "Open Set Domain Adaptation by Backpropagation", Kuniaki Saito, Shohei Yamamoto, Yoshitaka Ushiku and Tatsuya Harada, ECCV 2018
- [13] "Adversarial Dropout Regularization for Domain Adaptation", Kuniaki Saito, Yoshitaka Ushiku, Tatsuya Harada and Kate Saenko, ICLR 2018
- [14] "Maximum Classifier Discrepancy for Domain Adaptation", Kuniaki Saito, Kohei Watanabe, Yoshitaka Ushiku and Tatsuya Harada, CVPR 2018 (oral)
- [15] "Spatio-temporal Person Retrieval via Natural Language Queries", Masataka Yamaguchi, Kuniaki Saito, Yoshitaka Ushiku and Tatsuya Harada, ICCV 2017
- [16] "Asymmetric Tri-training for Unsupervised Domain Adaptation", Kuniaki Saito, Yoshitaka Ushiku, and Tatsuya Harada, ICML 2017
- [17] "DeMIAN: Deep Modality Invariant Adversarial Network", **Kuniaki Saito**, Yusuke Yukuta, Yoshitaka Ushiku, and Tatsuya Harada, TASKCV Workshop at ICCV 2017
- [18] "DualNet: Domain-Invariant Network for Visual Question Answering", **Kuniaki Saito**, Andrew Shin, Yoshitaka Ushiku, and Tatsuya Harada, ICME, 2017

Presentations

- [1] Invited to present "COCO-FUNIT: Few-Shot Unsupervised Image Translation with a Content Conditioned Style Encoder" by Nvidia, June 2020.
- [2] Invited to present "Asymmetric tri-training for Unsupervised Domain Adaptation" at MIRU 2017 (Domestic Conference on Computer Vision) (assigned to senior due to schedule conflict)
- [3] Invited to present "Asymmetric tri-training for Unsupervised Domain Adaptation" at IBIS 2017 (Domestic Conference on Machine Learning) (in English)
- [4] Invited to present "Maximum Classifier Discrepancy for Unsupervised Domain Adaptation" at MIRU 2018 (Domestic Conference on Computer Vision)

AWARD AND SCHOLARSHIP

- NVIDIA Pioneering Research Awards at ICML 2017 (see Publications [3])
- UTokyo-TOYOTA Study Abroad Scholarship 2017

ADDITIONAL

- Japanese (native), English (fluent)
- Kendo enthusiast for over 14 years; reached 4-dan level (level required to be able to teach)