TAKEHIKO OHKAWA

Tokyo, Japan
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RESEARCH INTERESTS

Computer Vision, Deep Learning and Machine Learning
(Deep Generative Models, Domain Adaptation, Reinforcement Learning, and First-Person Vision)

EDUCATION

The University of Tokyo (UTokyo) *April 2020 - Present*
M.A.S. in Graduate School of Interdisciplinary Information Studies
Advisor: Yoichi Sato, Jun Rekimoto

Tokyo Institute of Technology (TokyoTech) *April 2017 - March 2020*
B.E. in Computer Science (for 3 years the fastest record)
GPA: 3.93/4.00
Ranked 1st out of 4 early graduates in class.
Thesis: *Augmented Cyclic Consistency Regularization for Unpaired Image-to-Image Translation*
Advisor: Nakamasa Inoue

PUBLICATIONS

Augmented Cyclic Consistency Regularization for Unpaired Image-to-Image Translation
Takehiko Ohkawa, Naoto Inoue, Hirokatsu Kataoka, and Nakamasa Inoue
https://arxiv.org/abs/2003.00187

Style Adapted DataBase: Generalizing Hand Segmentation via Semantics-aware Stylization
Takehiko Ohkawa, Takuma Yagi, and Yoichi Sato
In IEICE Technical Report (PRMU2020), Japan (online)

Consistency Regularization using Data Augmentation for Cycle-Consistent GANs
Takehiko Ohkawa, Naoto Inoue, Hirokatsu Kataoka, and Nakamasa Inoue
In MIRU2020, Japan (online)

Stabilizing Object-aware Representation Learning with Cyclical Annealing on KL Regularization
Hideki Tsunashima, **Takehiko Ohkawa**, Hiroaki Aizawa, Hirokatsu Kataoka and Shigeo Morishima
In MIRU2020, Japan (online)

PROJECTS

***cvpaper.challenge*, AIST** *February 2019 - Present*

A student researcher of cvpaper.challenge, a comprehensive survey and collaborative research project in the field of computer vision and pattern recognition, principally investigated by Dr.Hirokatsu Kataoka in the National Institute of Advanced Industrial Science and Technology (AIST). A paper "Augmented Cyclic Consistency Regularization for Unpaired Image-to-Image Translation" is published.

Toxicity Prediction, Sekijima Lab, Tokyo Tech *May 2019 - August 2019*

Conducted a research project for toxicity prediction using deep learning advised by Prof.Masakazu Sekijima. I designed graph convolutional neural networks for analyzing the structure of chemical compounds and the toxicity.

Speech & Vision, Shinoda Lab, Tokyo Tech *February 2019 - October 2019*

Researched on deep generative models for graphic use, advised by Prof.Koichi Shinoda and Prof.Nakamasa Inoue. Moreover, I participated in group reading for speech recognition and computer vision. I made a presentation for stabilization techniques for GANs.

Alpha"Othello" Zero *October 2018 - January 2019*

Conducted an advanced research project in the class of "Artificial Intelligence" at Dept. Computer Science advised by Prof.Koichi Shinoda. I proposed a small- sized AlphaZero algorithm and experimented with it in the Othello game.

NLP Summer Seminar, Matsuo Lab, UTokyo *August 2018 - September 2018*

Researched and implemented several algorithms in natural language processing (NLP) and deep learning advised by Prof.Naoaki Okazaki, Prof.Yoshimasa Tsuruoka and Prof.Yutaka Matsuo. I ranked within the top 10th in a machine translation competition.

NLP Seminar, Okazaki Lab, Tokyo Tech *March 2018 - August 2018*

Implemented fundamental algorithms of natural language processing and machine learning, and reviewed the codes with each other, advised by Prof.Naoaki Okazaki.

WORK EXPERIENCE

OMRON SINIC X Corp. *August 2020 - Present*
Research Internship

Worked on domain adaptation in first-person vision with Dr.Yoshitaka Ushiku and Dr.Atsushi Hashimoto.

Neural Pocket Inc. *October 2019 - May 2020*
Research Internship

Worked on pixel-level domain adaptation for face recognition.

Department of Computer Science, TokyoTech *August 2019 - March 2020*
Research Assistant

Worked on large-scale computing experiments using a series of supercomputers at TokyoTech, Tsubame3.0. with Prof.Nakamasa Inoue.

teamLab Inc. *August 2019*
Engineering Internship

Worked on an artistic generation using computer vision techniques and created artwork in the interactive and computer vision team.

Cross Compass Ltd. *December 2017 - November 2018*
Research Internship

Worked on visual pattern recognition, deep generative models, and reinforcement learning.

AWARDS & GRANTS

JEES/Softbank AI Scholarship *April 2020 - March 2021*
Tokio Marine Kagami Memorial Foundation Scholarship *April 2018 - March 2020*