Bruno Andreis

CONTACT INFORMATION

KAIST
Graduate School of Artificial Intelligence

E-mail: andries@kaist.ac.kr
Web: andreisbruno.github.io

RESEARCH INTERESTS

My reseach is mainly focused on deep learning and machine learning methods for set structured data. Many problems in machine learing such as point cloud classification, object segmentation, object-centric relation learning, feature and instance selection etc. can all be cast into the framework of set based machine learning. My goal is to develop efficient algorithms for processing such data and applying them to practical problems in computer vision, reinforcement learning and natural language processing.

EDUCATION

KAIST, South Korea

Ph.D. Student, Graduate School of AI, **March 2020 - Present**

- Machine Learning and Artificial Intelligence (MLAI) Lab
- Adviser: Sung Ju Hwang
- Area of Study: Machine Learning, Deep Learning

M.S., School of Computing, February 2020

- Thesis Topic: *Video Object Detection and Segmentation*
- Adviser: Sung Ju Hwang
- Area of Study: Computer Vision, Reinforcement Learning

UNIST, South Korea

B.S., Electrical and Computer Engineering, February 2018

- Minor in Computer Science and Engineering

PUBLICATIONS

(*: equal contribution)

[1] Seanie Lee*, **Bruno Andreis***, Kenji Kawaguchi, Juho Lee and Sung Ju Hwang.
Set-based Meta-Interpolation for Few-Task Meta-Learning.
(NeurIPS2022) *Advances in Neural Information Processing Systems 35 (2022).*
arxiv.2205.09990

[2] **Bruno Andreis**, Seanie Lee, A. Tuan Nguyen, Juho Lee, Eunho Yang and Sung Ju Hwang.
Set Based Stochastic Subsampling.
(ICML2022) *International Conference on Machine Learning 39 (2022).*
arXiv:2006.14222

[3] **Bruno Andreis**, Jeffrey Willette, Juho Lee, and Sung Ju Hwang.
Mini-Batch Consistent Slot Set Encoder for Scalable Set Encoding.
(NeurIPS2021) *Advances in Neural Information Processing Systems 34 (2021).*
arXiv:2103.01615

[4] Jeffrey Willette, **Bruno Andreis**, Juho Lee, Sung Ju Hwang
Universal Mini-Batch Consistency for Set Encoding Functions
(Preprint) *arxiv.2206.09604*

[5] Hyunsu Rhee, Dongchan Min, Sunil Hwang, **Bruno Andreis**, Sung Ju Hwang
Distortion-Aware Network Pruning and Feature Reuse for Real-time Video Segmentation.
(NeurIPS 2022 Machine Learning for Autonomous Driving Workshop) *arxiv.2206.09604*

Research Experience

AITRICS, Summer 2022

Research Intern

- Research Topic: Deep Learning based Virtual Human with Motion Articulation.

Netlab UNIST, 2015-2017

Research Intern

- Adviser: Changhee Joo
- Research Topic: P2P Navigation System

NECSST Lab UNIST, 2016 (Summer)

Research Intern

- Adviser: Sam H. Noh
- Research Topic: Flash Device Simulation in C

MLVR Lab UNIST, 2016

Research Intern

- Adviser: Sung Ju Hwang
- Research Topic: Deep-Learning Based Survivor Detection System for Unmanned Aeriel Vehicles