ANDRII SKLIAR

Artificial Intelligence Research Engineer @ Qualcomm AI Research

@ andrew.skliar@gmail.com in linkedin.com/in/andriiskliar github.com/askliar
Amsterdam, Netherlands

EXPERIENCE

Senior Research Engineer

Qualcomm AI Research

Oct 2019 – Currently Netherlands

- Worked on model efficiency within research team formerly lead by Prof. Max Welling.
- Led critical projects in hardware-oriented machine learning, bridging the gap between engineering and research.
- Managed concurrent initiatives, including Device Test Microservice and Large-Scale MoE Models, showcasing commitment to excellence and readiness for increased responsibilities.
- Extensive knowledge of research methodologies, software development, and decision-making processes.
- Contributed to research papers in Neural Architecture Search and Conditional Compute, demonstrating expertise in both theoretical and practical aspects of machine learning.

Research Intern

QUVA Lab

May 2019 – Oct 2019 Netherlands

- Master's thesis internship in collaboration with QUVA Lab under the supervision of Maurice Weiler.
- The main goal of the project is to explore how Riemannian manifolds can be used to improve the performance of current Neural Network models.

Artificial Intelligence Intern

IBM Extreme Blue

Jun 2018 - Sep 2018 Amsterdam, Netherlands

Technology stack: Swift, Python

Software Engineer

Intetics Inc.

Feb 2017 - Aug 2017 Kyiv, Ukraine

Technology stack: Haskell, MySQL, Python, PHP

EDUCATION

MSc in Artificial Intelligence

University of Amsterdam

Sep 2017 - Aug 2019 Netherlands

- GPA: 8.8/10, Cum Laude
- Honours programme with multiple successful research projects.
- Courses in Theoretical and Applied Machine Learning with main focus on Advanced Machine Learning, Deep Learning, Computer Vision, Reinforcement Learning and Information Theory.

BSc in System Analysis

NTUU "Kyiv Polytechnical University",
ESC "Insitute of Applied System Analysis"

Sep 2013 - Jul 2017 Ukraine

- Courses in Applied Math, Statistics and Computer Science.
- GPA: 4.74/5, Top 5% of the Year Group

Erasmus+ Exchange Semester

University of Groningen

Sep 2016 - Feb 2017 Netherlands

- Bachelor- and Master- level courses in Computer Science and Artificial Intelligence

PROJECTS

Revisiting Single-gated Mixtures of Experts, Royer et al.

21st November 2022, BMVC 2022

- Introduced an efficient single-gate Mixture of Experts (MoE) model, avoiding router collapse issues and achieving comparable efficiency-to-accuracy trade-offs to complex MoE models.

Cyclical Pruning for Sparse Neural Networks, Srinivas et al.

20th June 2022, CVPR 2022 ECV Workshop

- Proposed cyclical pruning strategy to recover erroneously pruned weights and boost neural network performance.

Simple and Efficient Architectures for Semantic Segmentation, Mehta et al.

20th June 2022, CVPR 2022 ECV Workshop

- Developed a simple encoder-decoder architecture with modified backbones that outperforms complex models in semantic segmentation.

Simulated Quantization, Real Power Savings, van Baalen et al.

20th June 2022, CVPR 2022 ECV Workshop

- Leveraged reduced precision hardware accelerators and simulated quantization to optimize the accuracy-power efficiency trade-off in neural networks.

Distilling Optimal Neural Networks: Rapid Search in Diverse Spaces, Moons et al.

ICCV 2021, online

- Created DONNA, a rapid, scalable, and diverse Neural Architecture Search (NAS) pipeline for state-of-the-art results across various hardware platforms, with search-space extension, exploration, and hardware-aware model compression.

Honours Project: Adding Object Detection Skills to Visual Dialogue Agents, Bani et al.

8th September 2018, ECCV 2018 SIVL Workshop, Munich

- Developed dialogue agent for GuessWhat?! game using Mask R-CNN object features, offering new possibilities and competitive performance.