## **ANDRII SKLIAR**

#### Artificial Intelligence Research Engineer @ Qualcomm AI Research

@ andrew.skliar@gmail.com • Amsterdam, Netherlands

in linkedin.com/in/andriiskliar

ngithub.com/askliar



### **EXPERIENCE**

#### 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.

♥ Kyiv, Ukraine

Technology stack: Haskell, MySQL, Python, PHP

### **EDUCATION**

#### MSc in Artificial Intelligence

#### **University of Amsterdam**

M 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

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.

**Q** 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.

**Q** 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.