Contact Information

100 North Whisman Road #1515, Mountain View, California 94043, USA $+1 \ (650) \ 772 \ 8529$ arslanch@deepmind.com http://www.robots.ox.ac.uk/~arslan/

Experience

Sr. Research Scientist, Google DeepMind

April 2021 - Present

- Team: Adaptive and Reliability Team (ART)
- Focus Areas:
 - Foundation Models:
 - * Multimodal finetuning and RLHF.
 - * Factuality and Uncertainty of LLMs.
 - Continual-, Meta-, Auto-ML.

Research Internships

• Google Research

June 2020 - September 2020

- Hosts: Srikumar Ramalingam, Andreas Veit
- Project: Mixup regularization for dataset efficiency
- Facebook AI

June 2019 - September 2019

- Hosts: Albert Gordo, David Lopez-Paz
- *Project*: Experience Replay for Continual Learning
- Facebook AI Research

June 2018 - February 2019

- Hosts: Mohamed Elhoseiny, Marcus Rohrbach, Marc'aurelio Ranzato
- Project: Efficient Lifelong Learning.

Sr. Software Developer, Mentor Graphics

June 2013 - Aug 2016

• Developed a Virtual Machine Monitor (VMM)/ Hypervisor for ARM and Intel platforms.

Education

PhD, University of Oxford, United Kingdom

Oct 2016 - December 2020

- Rhodes Scholarship
- Area: Machine Learning and Computer Vision
- Advisor: Philip H.S. Torr
- Thesis: Continual Learning for Efficient Machine Learning

 $^{^{1}}$ Updated: 06 May, 2024

BSc, University of Engineering & Technology, Lahore Sep 2009 - Aug 2013

• Area: Electrical Engineering

• CGPA: 3.95/4.0 (Rank: 1/400+; Medalist)

• Thesis: Load balancing of compute intensive applications on Beowulf clusters

Publications

Google Scholar[https://scholar.google.co.uk/citations?user=F08vjQMAAAAJ&
h1]

Teaching

Tutorials, **Machine Learning**, Hilary 2020, Trinity 2018, Stanford House (Oxford) Tutorials, **Networking**, Trinity [2018, 2019] University of Oxford Tutorials, **Operating Systems**, Hilary [2018, 2019], University of Oxford Lab, **Software Engineering**, Hilary [2017, 2018, 2019], University of Oxford Teaching Assistant, **Operating Systems**, Spring 2013, UET, Lahore

Talks

- CVPR'23, On Forward Transfer in ML Development Cycle, June 2023.
- KAUST, Continual Learning in Deep Neural Networks, July 2020
- Google Research, Continual Learning in Deep Neural Networks, July 2020
- Google DeepMind, Continual Learning in Deep Neural Networks, April 2020
- UET Lahore, Machine Learning Introduction, December 2017

Computing Expertise

Languages: Python, C

Programming Paradigms: Linux Kernel and Driver Development, Paral-

lel Programming, CUDA Programming

Machine Learning Frameworks: Jax, Tensorflow

Embedded Systems: ARM TrustZone, Intel's VT-d and VT-x

Awards Grants Fellowships

Amazon Research Award, 2019-2020

NeurIPS Travel Award, 2019 ICLR Travel Award, 2018

Murray Speight Grant, Rhodes House, 2018

Rhodes Scholar, 2016

Performance Excellence Award, Virtualization Team, Mentor Graphics ESD, **2015** Topper and Gold medalist of Electrical Engineering Department, UET Lahore, **2013**

Deans Honors List, UET Lahore, 2009-2013

Nominated for IEEE Region 10 executive comity by IEEE Lahore Section, **2013** Obtained third position in BLOSSOM held by MIT officials at PYF, **2012**

Winner of Race to Innovation in Pakistan Student Congress, **2012**

Obtained third position in Pakistan in IEEE Xtreme Programming Competition, **2012**

PCS scholarship recipient worth PKR 113980, 2007-2009

Service

Reviewer for ICML [19-24], NeurIPS [19-22], ICLR [21-22], AISTATS[22], CVPR [19-20], ECCV[20], ICCV [19], CoLLas [22-24] Reviewer for TPAMI, JMLR, IEEE Transaction on Multimedia