

# Arslan Chaudhry

<b>Contact Information</b>	Flat 164, Block D, Castle Mill, Roger Dudman Way, Oxford OX1 1GA, United Kingdom	(44)7491-875617 arslan.chaudhry@new.ox.ac.uk <a href="http://www.robots.ox.ac.uk/~arslan/">http://www.robots.ox.ac.uk/~arslan/</a>
<b>Education</b>	<b>University of Oxford</b> , United Kingdom <b>Oct 2016 - Present</b> <i>Doctor of Philosophy (DPhil) in Machine Learning and Computer Vision</i> <ul style="list-style-type: none"><li>• Advisor: Philip H.S. Torr</li><li>• Focus: Continual Learning in Neural Networks.</li><li>• <b>Rhodes Scholar (2016)</b></li></ul> <b>University of Engineering &amp; Technology</b> , Lahore, Pakistan <b>August 2013</b> <i>Bachelor of Science in Electrical Engineering</i> <ul style="list-style-type: none"><li>• CGPA: 3.95/4.0 (Highest honors)</li><li>• Multiple gold medals for graduating at the top of 400+ students graduating class</li><li>• Thesis: Load balancing of compute intensive applications on Beowulf clusters</li></ul>	
<b>Professional Experience</b>	<b>Research Intern</b> , Facebook AI <b>June 2019 - September 2019</b> <ul style="list-style-type: none"><li>• <i>Mentors</i>: Albert Gordo, David Lopez-Paz</li><li>• <i>Project</i>: Experience Replay for Continual Learning</li></ul> <b>Visiting Researcher</b> , Facebook AI Research (FAIR) <b>June 2018 - February 2019</b> <ul style="list-style-type: none"><li>• <i>Mentors</i>: Marc'aurelio Ranzato, Marcus Rohrbach, Mohamed Elhoseiny,</li><li>• <i>Project</i>: Efficient Lifelong Learning.</li></ul> <b>Sr. Software Development Engineer</b> , Mentor Graphics <b>June 2013 - Aug 2016</b> Developed a Virtual Machine Monitor (VMM)/ Hypervisor for ARM and Intel platforms. Lead the development of: <ul style="list-style-type: none"><li>• Secured (using TrustZone – ARM) and virtualized (VT-x/ VT-d – Intel) Memory Management Unit (MMU)</li><li>• Networking and console drivers based on virt-IO</li><li>• Profiling and visualization toolkit</li><li>• Build/ configure and packaging system</li><li>• Received multiple performance excellence awards</li></ul>	
<b>Publications</b>	<ol style="list-style-type: none"><li>1. <b>Arslan Chaudhry</b>, Albert Gordo, David Lopez-Paz, Puneet K. Dokania, Philip H. S. Torr, Using Hindsight to Anchor Past Knowledge in Continual Learning, International Conference on Machine Learning (ICML), 2020 (Under Submission).</li><li>2. <b>Arslan Chaudhry</b>, Marcus Rohrbach, Mohamed Elhoseiny, Thalaiyasingam Ajanthan, Puneet K. Dokania, Philip H.S. Torr, Marc'Aurelio Ranzato; <i>Continual Learning with Tiny Episodic Memories</i>, International Conference on Machine Learning (ICML), MTLRL Workshop, 2019.</li><li>3. <b>Arslan Chaudhry</b>, MarcAurelio Ranzato, Marcus Rohrbach, Mohamed Elhoseiny; <i>Efficient Lifelong Learning with A-GEM</i>, International Conference on Learning Representations (ICLR), 2019.</li></ol>	

4. **Arslan Chaudhry**, Puneet K. Dokania, Thalaiyasingam Ajanthan, Philip Torr; *Riemannian Walk for Incremental Learning: Understanding Forgetting and Intertransigence*, In the Proceedings of the European Conference on Computer Vision (ECCV), 2018.
5. **Arslan Chaudhry**, Puneet K. Dokania, Philip Torr; *Discovering Class-Specific Pixels for Weakly-Supervised Semantic Segmentation*, In the Proceedings of the British Machine Vision Conference (BMVC), 2017. **(oral)**

<b>Teaching</b>	Tutorials, <b>Machine Learning</b> , Trinity 2018, Stanford House Tutorials, <b>Networking</b> , Trinity [2018, 2019] University of Oxford Tutorials, <b>Operating Systems</b> , Hilary [2018, 2019], University of Oxford Lab, <b>Software Engineering</b> , Hilary [2017, 2018, 2019], University of Oxford Teaching Assistant, <b>Operating Systems</b> , Spring 2013, UET, Lahore	
<b>Computing Expertise</b>	<u>Languages:</u>	C, C++, Python, numpy, Shell Scripting, SQL, PHP, Eclipse P2 Development, Verilog (HDL), Assembly language (ARM, x86, MIPS and 80c51), GNU/Linux Programming, MATLAB, L <sup>A</sup> T <sub>E</sub> X
	<u>Programming Paradigms:</u>	CUDA Programming, System Programming, Linux Kernel and Driver Development, Parallel Programming, Application Level Programming, Agile Sprint Development
	<u>Machine Learning Frameworks:</u>	Tensorflow, Pytorch, Keras
	<u>Advanced MPS Modules:</u>	ARM TrustZone, Intel's VT-d and VT-x
<b>Leadership Activities</b>	<b>President</b> , IEEE UET Lahore	<b>June 2012 - June 2013</b>
	As president, I was responsible for the overall performance of the chapter. Presided all technical, budget and alumni committee meetings. Represented the society at the <i>Pakistan Student Congress 2012</i> . The chapter won the <i>Best Student Branch of Lahore Section</i> award during my tenure.	
<b>Awards Grants Fellowships</b>	Murray Speight Grant, Rhodes House, <b>2018</b> Rhodes Scholar, <b>2016</b> Performance Excellence Award, Virtualization Team, Mentor Graphics ESD, <b>2015</b> Topper and Gold medalist of Electrical Engineering Department, UET Lahore, <b>2013</b> Deans Honors List, UET Lahore, <b>2009-2013</b> Nominated for IEEE Region 10 executive comity by IEEE Lahore Section, <b>2013</b> Obtained third position in BLOSSOM held by MIT officials at PYF, <b>2012</b> Winner of Race to Innovation in Pakistan Student Congress, <b>2012</b> Obtained third position in Pakistan in IEEE Xtreme Programming Competition, <b>2012</b> PCS scholarship recipient worth PKR 113980, <b>2007-2009</b>	
<b>Service</b>	Reviewer for ICML [2019-2020], NeurIPS [2019-], CVPR [2019-2020], ICCV [2019-] Reviewer for IEEE Transaction on Multimedia	