

Evgeny Ponomarev

LinkedIn : [linkedin.com/in/evgps](https://www.linkedin.com/in/evgps)
Github : github.com/evgps
Google Scholar : bit.ly/evgps_scholar

evgenii.ponomarev@skoltech.ru
(+7) 977-251-51-84

EDUCATION	Skoltech, Moscow CGPA: 5.00/5.00 2017 – 2021 <i>PhD</i> , Computer Science and Engineering(CSE) Skoltech and Moscow Institute of Physics and Technology, Moscow GPA: 4.76/5.00 2015 – 2017 <i>Master</i> , Computer Science and Engineering(CSE) Moscow Institute of Physics and Technology, Moscow GPA: 4.79/5.00 2011 – 2015 <i>Bachelor</i> , Applied Mathematics and Physics Eastbourne School of English, UK Summer 2014 <i>English Language Course</i> C1 (TOEFL-ITP: 557)
TECHNICAL SKILLS	Primary Language: Python Frameworks : PyTorch, TensorFlow, Keras, sklearn/scipy/numpy/pandas Familiar : Matlab, C++, R Tools : Slurm, Docker, Linux, Git General : Deep Learning, Computer Vision, Numerical Algebra, Algorithms
PROJECTS	Automated Multi-Stage Compression of Neural Networks An automated neural network compression tool. Accelerate neural networks for object detection (Faster R-CNN) and classification (Resnet/VGG) using tensor decomposition methods without accuracy drop. The idea is to substitute a huge convolution layer with three tiny ones with a much smaller number of params and required computations. I did all the object detection part. <ul style="list-style-type: none">• Keywords: PyTorch, Tensor Decompositions, Object Detection• ICCV-2019 LPCVW paper: http://bit.ly/musco_paper Reduced-Order Modeling of Deep Neural Networks: Data-specific neural networks speed-up method. The idea is replacing convolutions layers with much smaller dense layers with a relatively small drop in accuracy and notable acceleration. <ul style="list-style-type: none">• Paper : https://arxiv.org/abs/1910.06995
Skoltech 2019	
Skoltech 2017	Reinforcement Learning for Trading: I trained a trading robot through reinforcement learning with usage recurrent neural networks and achieved 66% annual return on historical data (counting commissions). <ul style="list-style-type: none">• Keywords: TensorFlow, Reinforcement Learning, Actor-Critic• Paper : https://arxiv.org/abs/2002.11523• Code : https://github.com/evgps/a3c_trading
RoboCV 2016	RGBD-based goods visual localization: I created the prototype of a visual system for automated wholesale storage. The system finds a spatial position of boxes. RGBD camera was used as a sensor, RoboCV company used my code in their MVP.
Visillect 2015	Self-motion estimation by monocular optical flow: Recovering self-motion (rotation) from optical flow, estimated by monocular video. Individual project.
TEACHING	Teacher assistant at Skoltech courses: • Numerical Linear Algebra (2018) • Introduction to Data Science (2018 and 2019) Speaker for external commercial education seminars: • Introduction in Reinforcement Learning (2017) • Introduction in Machine learning (2019)
AWARDS	• UMNİK grant for self-projects (2017-2019) • Best student paper award for 59 conference of Moscow Institute of Physics and Technology (2016) • Russian step International Physicist Tournament - winner (2014,2015) • Innovative Education Development scholarship (2011-2014)