

Ivan Skorokhodov

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Selected publications

- Oct 2021 **Aligning Latent and Image Spaces to Connect the Unconnectable**, *ICCV 2021*.
Ivan Skorokhodov, Grigorii Sotnikov, Mohamed Elhoseiny
[\[paper\]](#) [\[website\]](#) [\[code\]](#)
- Jun 2021 **Adversarial Generation of Continuous Images**, *CVPR 2021*.
Ivan Skorokhodov, Savva Ignatyev, Mohamed Elhoseiny
[\[paper\]](#) [\[website\]](#) [\[code\]](#)
- May 2021 **Class Normalization for (Continual?) Zero-Shot Learning**, *ICLR 2021*.
Ivan Skorokhodov, Mohamed Elhoseiny
[\[paper\]](#) [\[website\]](#) [\[code\]](#)
- Dec 2019 **Loss Surface Sightseeing by Multi-Point Optimization**, “Beyond First Order Methods in ML” workshop, *NeurIPS 2019*.
Ivan Skorokhodov, Mikhail Burtsev
[\[paper\]](#) [\[website\]](#) [\[code\]](#)
- Mar 2018 **Semi-Supervised Neural Machine Translation with Language Models**, *AMTA workshop, ACL 2018*.
Ivan Skorokhodov, Anton Rykachevskiy, Dmitry Emelyanenko, Sergey Slotin, Anton Ponkratov
[\[paper\]](#)

Work experience

- Mar 2020–
now **CS PhD student**, [King Abdullah University of Science and Technology](#), Thuwal, Saudi Arabia.
I do my PhD under supervision of [prof. Mohamed Elhoseiny](#). My research interests include generative models, hypernetworks and neural rendering. I also have a small weakness on adversarial robustness.
- Feb 2018–
Mar 2020 **Deep Learning Researcher**, [Moscow Institute of Physics and Technology](#), Moscow, Russia.
Under supervision of [Mikhail Burtsev](#), I was doing projects on text style transfer using Transformers and CycleGAN and loss landscape analysis using mode connectivity ideas.
- Oct 2019–
Dec 2019 **Visiting Student**, [King Abdullah University of Science and Technology](#), Thuwal, Saudi Arabia.
I was working on a project to combine zero-shot learning and continual learning.
- Mar 2015–
Oct 2016 **Software Engineer**, [Yandex](#), Moscow, Russia.
I was doing traditional software engineering for <https://market.yandex.ru> (front-end, mostly) + some corresponding infrastructure work (deployment, unit/integration/stress tests, etc).
- Sep 2014–
Mar 2015 **Senior Software Engineer**, [Federal State Statistics Service](#), Moscow, Russia.
I built a web crawler for automatic dictionary generation: it parsed web pages on a specified topic, detected terms and definitions, categorized them, processed and saved into the database.
- Jan 2014–
Sep 2014 **Full-Stack Software Engineer**, [Brainarium](#), Moscow, Russia.
I built a kaggle-like platform with node.js + marionette.js stack and all the required infrastructure.

Education

- Mar 2020–
now **King Abdullah University of Science and Technology**, *Thuwal, Saudi Arabia*.
Visual Computing Center, PhD student, Computer Science. GPA: 3.92/4.
Supervisor: [prof. Mohamed Elhoseiny](#).
- Sep 2018–
Jul 2021 **Yandex School of Data Analysis**, *Moscow, Russia*.
M.S. equivalent, Data Analysis in Applied Sciences. GPA: 4.77/5.
Thesis: Normalization Matters in Zero-Shot Learning.
Supervisor: [prof. Ilya Muchnik](#)

- Sep 2014– **Moscow Engineering Physics Institute (MEPhI)**, *Moscow, Russia*.
 Jul 2016 M.S., Applied Informatics. GPA: 4.78/5.
 Thesis: Product Search Ranking with Neural Networks.
 Supervisor: prof. Anna Tikhomirova.
- Sep 2010– **Moscow Engineering Physics Institute (MEPhI)**, *Moscow, Russia*.
 Jul 2014 B.S. (with honors), Innovative Management. GPA: 4.88/5
 Thesis: Software Development Management Systems.
 Supervisor: Igor Prokhorov, P.h.D.

Teaching experience

- Spring 2021 **Teaching assistant**, *King Abdullah University of Science and Technology*, Thuwal, Saudi Arabia.
 “Deep Generative Models” course, taught by [prof. Mohamed Elhoseiny](#).
- Fall 2020 **Teaching assistant**, *King Abdullah University of Science and Technology*, Thuwal, Saudi Arabia.
 “Data-Efficient Deep Learning” course, taught by [prof. Mohamed Elhoseiny](#).
- Fall 2019 **Teaching assistant**, *Moscow Institute of Physics and Technology*, Moscow, Russia.
 “Theoretical Deep Learning” course (part II), taught by Evgeniy Golikov.
- Spring 2019 **Teaching assistant + Lectures on Information Bottleneck**, *Moscow Institute of Physics and Technology*, Moscow, Russia.
 “Theoretical Deep Learning” course (part I), taught by Evgeniy Golikov.
 My lecture lectures on Information Bottleneck can be viewed [here](#).

Selected pet projects

- Sep 2020– **RtRs** [\[github\]](#).
- Dec 2020 Simple ray tracing and rasterization engine written in [rust](#). There are various features implemented: quadrics/mesh rendering, distributed ray tracing, camera movement, arcball controls, etc.
- Dec 2020 **Gaussian Non-Uniform Interpolation** [\[github\]](#) [\[paper\]](#).
 A CUDA kernel which is able to interpolate points on a non-uniform grid. This is done by representing each point as a 2D gaussian distribution.
- Nov 2018– **Firelab** [\[github\]](#).
- Aug 2020 Python framework for running pytorch experiments. Supports multi-gpu hyperparameters optimization, training class boilerplate, tensorboard logging, etc.
- Oct 2016– **Aladdin** [\[github\]](#).
- Mar 2017 A betting arbitrage bot written in [rust](#).
- May 2016 - **Omniplan Web** [\[github\]](#).
- Aug 2016 A web view for [omniplan](#) platform written with [react.js](#).

Tech skills

- Coding python, rust, CUDA, C++, javascript
- ML/DL libs torch, torchvision, tensorflow, sklearn, pandas, numpy
- Miscellaneous docker, git, bash, \LaTeX

Hackathons performance

- Nov 2018 **Junction**, *SAP incentive award*, [Junction Team](#), Espoo, Finland.
- Jun 2018 **BlockchainHack**, *1st place*, Blockchain Institute, Moscow, Russia.
- Feb 2018 **Unsupervised Machine Translation**, *2nd place*, [MIPT](#), Dolgoprudny, Russia.
- Aug 2017 **FunHack**, *some minor prize*, Science Guide, Moscow, Russia.
- Nov 2016 **VK hackathon**, *1st place + people's choice award*, [VK](#), Saint-Petersburg, Russia.
- Nov 2016 **BEM hackathon**, *1st place*, [Yandex](#), Moscow, Russia.