Ilia Igashov

+33-749-218-755
igashov.is@phystech.edu
LinkedIn: igashov
GitHub: igashov

Education

2020 - Present **Université Grenoble Alpes - Grenoble INP**,
Master of Science in Industrial and Applied Mathematics (2nd year).

2019 - Present **Moscow Institute of Physics and Technology**,
Master of Science in Informatics and Computer Engineering.
Thesis: Graph convolutional networks for protein quality assessment.

2015 - 2019 **Moscow Institute of Physics and Technology**,
Bachelor of Science in Applied Mathematics and Physics, GPA: 4.5/5.
Thesis: Application of multi-armed bandits in Yandex.Radio.

Experience

Apr 2020 - Present **Head of Data Science**, **PeakData**, Remote.
- NLP startup in healthcare domain aimed to gather and process information on medical topics.

Nov 2019 - May 2020 **Research Intern**, **Inria Rhône-Alpes**, Nano-D Team, Grenoble, France.
- Created methods VoroCNN and Spherical Graph Convolutional Network (S-GCN) for protein MQA problem.

Sep 2018 - Oct 2019 **Software Developer**, **Yandex.Music**, Recommendation Team, Moscow, Russia.
- Launched three smart playlists based on personal recommendation algorithms.
- Implemented Multi-Armed Bandits algorithm for optimal recommendation of radio stations for new users.
- Created personal recommendations of podcasts and promotions.

Feb 2018 - May 2018 **Academic Intern**, **iPavlov AI**, Moscow, Russia.
- Practice in NLP project: NER system for Russian language.

July 2017 - Aug 2017 **Summer Intern**, **Intel**, Nizhny Novgorod, Russia.
- Implemented and integrated additional split criteria in Decision Tree algorithm for Intel DAAL.

Publications

- Ilia Igashov, Nikita Pavlichenko, Sergei Grudinin. "Spherical convolutions on molecular graphs for protein model quality assessment". *Preprint*. 2020. arXiv: 2011.07980.

- Ilia Igashov, Kliment Olechnovič, Maria Kadukova, Česlovas Venclovas, Sergei Grudinin. "VoroCNN: Deep convolutional neural network built on 3D Voronoi tessellation of protein structures". *In revision at Bioinformatics*. 2020. bioRxiv doi: 2020.04.27.063586.

Projects & Activities

Apr 2020 - Aug 2020 **Critical Assessment of protein Structure Prediction**, *Participant*.
- 3 variations of VoroCNN + Spherical Graph Convolutional Network (S-GCN) for CASP14.
- 2 variations of VoroCNN for CASP Commons, COVID-19.

Feb 2020 - May 2020 **Academic course "My first scientific paper" at MIPT**, *Mentor*.
- Supervised a MIPT student in research project on spherical convolutions for molecular graphs.

Dec 2019 **Tsukuba University - UGA Computer Science Workshop, Grenoble**, *Speaker*.
- Report "Graph convolutional networks in Structural Bioinformatics".

July 2019 - Aug 2019 **Sberbank Machine Learning Course, Moscow**, *Lecturer*.
- Taught introductory Python and Machine Learning courses for Sberbank employees.

Oct 2018 **Vk Hackathon, Saint Petersburg**, *Participant*.
- Created an Android application for recognition composers on wall posters (Moscow Philharmonia project).

Skills

Programming	Python, C/C++, Java, SQL
Frameworks	PyTorch, TensorFlow, Keras
Utilities	Git, Docker, Jupyter, Postgres, MySQL, MongoDB
Language	English (TOEFL iBT: 106), French (A2), Russian (Native)