Sergei Bogdanov

+7(966)139-06-24 | bogdanov.sv@phystech.edu | <u>linkedin</u> | github

EDUCATION

Moscow Institute of Physics and TechnologyGPA: 4.7/5Bachelor of Applied Mathematics and Computer Science, Minor in Machine LearningSep. 2018 - Aug 2022Yandex Data Analysis DepartmentApplied statistics, ML, Computer Vision, NLP, Reinforcement Learning, Python, GOJan. 2021 - Aug 2022School №2097 with advanced Math and Computer ScienceGPA: 5/5Golden medalistSep. 2008 - Aug 2018

TECHNICAL SKILLS

Languages: Python, Java, GO, C++, C, Javascript

Distributed systems and Databases: Hadoop, Hive, Spark, PostgreSQL.

Others: Cuda, MPI, CSS, HTML, React

Programming skills: Multithreading, Distributed systems, Advanced algorithms and Object Oriented Programming

English: C1, German: A2

Work experience

Researcher Data Scientist (CV, Computer Vision)

Oct. 2020 - Present

MIPT Laboratory, Face biometric department

- Developed **Face Coverage Estimator** which predicts the fraction of the facial features lost due to face being overlapped by objects. Model is **lightweight** and has **several working modes** available.
- Increased Face Detection MAP from 0.68 to 0.82 on Masked Faces
- Increased Face Identification TPR from 0.09 to 0.99 with FPR=1e-3 on Masked Faces, paper in progress
- Gathered unbiased dataset of masked faces with more than 25k images with different mask properties marked
- Developed light classifier with ROC AUC 0.999

Researcher Data Scientist (NLP, Natural Language Processing)

Jul. 2020 - Sep. 2020

Jetbrains, IntelliJ

- Researched graph models' usage for Natural Language Processing Tasks
- Responsible for method name generation task. My model is 5% better than Code2Vec model and comparable to Code2Seq model with disabled Attention (my model didn't have an attention mechanism too)
- Responsible for Code-SearchNet task. Top-20% out of all participants
- Developed Abstract Syntax Tree vertex classification system which covers more than 98% of all possible cases with extremely low memory usage. My algorithm is 8 times more memory-efficient than simple greedy approach and shows 10% better coverage on bigger dictionary sizes.

Olympiads

Informatics: Bauman Moscow State Technical University Informatics Olympiad Absolute winner, Moscow State University Informatics Olympiad Top-6%, ITMO Informatics Olympiad Double Awardee, All Russian Informatics Olympiad Top-5%

Mathematics: Moscow State University Math Olympiad Awardee, Financial University under the Government of the Russian Federation Math Olympiad Awardee.

ACTIVITIES

- Gave a **talk** reviewing COVID-19 impact on face-reliable models. **Reviewed** existing methods and **proposed** one new method fixing arisen issues.
- Contributor to face alignment library. My pull request fixed existing batching issue in the blazeface detector.
- Participant of 2019 Summer School by Russian Academy of Artificial Intelligence in MIPT.
- Volunteer in application committee in 2019 and in local orphanage in 2018
- Participant in a university debate club
- In my free time I develop personal commercial project, play guitar and work on my long-distance running skills