# Sergei Bogdanov

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#### **EDUCATION**

Moscow Institute of Physics and Technology, QS EECA top 10

Bachelor of Applied Mathematics and Computer Science, Minor in Machine Learning

Thesis: Reliable and Efficient Face Identification during COVID-19

Yandex School of Data Analysis

Computer Vision, 3d Computer Vision, Natural Language Processing,

ML for Audio and Speech, Recommendation Systems, Reinforcement Learning, Python, GO

GPA: 4.73/5

Sep. 2018 - Aug 2022

Sep. 2020 - Aug 2022

School №2097 with advanced Math and Computer Science

GPA: 5/5

#### Work experience

### Python Developer + Machine Learning Engineer

Aug. 2021 – Feb. 2022, May 2022 – Present

AgBlox, Silicon Valley startup, remote

- Designed and implemented robust algorithm for absolute daily searches estimation for the given topics.
- Responsible for design, BackEnd, ML & DevOps.
- Created scalable version of this algorithm by utilising AWS lambda functions.
- Decreased prediction fluctuation on noisy data by 3 times.
- Deployed project on AWS and developed API: EC2, lambda, RDS, S3, API Gateway, VPC, ECS.

#### Machine Learning Researcher (CV, Computer Vision)

Oct. 2020 – May 2022

Tinkoff, Face biometric department

- Solved Classification, Regression, Object Detection, Object Recognition, Model Compression, Segmentation, Image Reconstruction (AE, VAE), Best Frame Selection problems.
- Increased Face Detection MAP from 0.68 to 0.82 on Masked Faces.
- Decreased Face Recognition RAM usage (now 3 times smaller) without quality decrease.
- Increased Face Identification **TPR from 0.09 to 0.99** with FPR=1e-3 on Masked Faces.
- Increased Face Identification TPR from 0.94 to 0.96 with FPR=1e-7 on company's private dataset.

#### Python + Go Developer

Dec. 2021 – May 2022

Tinkoff, Face biometric department

- Developed quality assurance concurrent automatic tests of our products for dev & prod environments.
- Responsible for gRPC API expansion and Machine Learning models deployment.
- Stack: Go, Python, Docker, Kubernetes, Redis, PostgreSQL, S3.

## Machine Learning Researcher (NLP, Natural Language Processing)

Jul. 2020 – Sep. 2020

Jetbrains, IntelliJ

- Developed model for **Method name generation** task which is comparable to **SOTA**
- Developed model for Code-SearchNet task: Top-20% out of all competition participants.

#### OLYMPIADS

- BMSTU Informatics Olympiad Absolute winner.
- ITMO Informatics Olympiad Double Awardee. Top-3%
- Moscow State University Math Olympiad Awardee. Top-5%

#### ACTIVITIES AND LEADERSHIP

Vice President of the University's English speaking club.

Mentor intern Machine Learning Engineer at Tinkoff. The topic is model compression.

Gave the **interview** about my experience in Computer Vision and our team in Tinkoff Bank.

Gave a talk about my University thesis.

Recorded a lecture and a seminar about Computer Vision classification architectures and Neural Architecture Search.

Gave an intracorporate talk reviewing different Zero-Shot and Few-Shot object detection and classification approaches.

Volunteer in application committee at the University in 2019 and in local orphanage in 2018.