

Alim Bukharaev

Curriculum Vitae

☎ (+7) 917 537 91 73
✉ bukharaev.an@phystech.edu
📄 www.github.com/alimbfromlimb



Education

2017–Present **BSc in Applied Mathematics and Physics**, Chair of Information Transmission Problems and Data Analysis, Department of Control and Applied Mathematics, Moscow Institute of Physics and Technology, Moscow. Undergraduate student, 3rd year (current GPA 8.53/10).

Scholarships

2019–Present Increased State Academic Scholarship Award for achievements in educational activity
2018–2019 Phystech Foundation Scholarship Award for top-ranked students of MIPT

Computer Skills

Programming Python, C/C++, SQL

Libraries pytorch, keras, tensorflow, opencv, numpy, scipy, pandas, matplotlib

Tools Jupyter Notebook, git, ssh, PyCharm, Docker, SGE, TMUX, L^AT_EX

Publications

Neuroscience and Medical Data Analysis **Adapting Probabilistic U-Net for Midline Shift Detection** IITP RAS (*the lab*)
In co-authorship and under supervision of Junior Researcher Maxim Pisov and Dr. Mikhail Belyaev
Published as part of the ITaS'19 conference (*the paper, the conference, poster and code*)

Projects & Experience

Deep Learning **Musical Instruments Classification** 🤖 A part of MIPT 4th semester CS course
Team project. A website for audio file editing was implemented. Was responsible for writing a neural network capable of distinguishing musical instruments by sound

CVision **Testing Pixellink** 🤖 Laboratory of Hybrid Intelligent Systems, MIPT
The goal of the project was to study how well a novel image-segmentation algorithm Pixellink 🤖 works in collaboration with some text-reading models

Data Science **Spectral Analysis** 🤖 Supervisor Junior Researcher Artem Borzov, IITP RAS
Spectral Clustering Algorithm (according to Ng, Jordan and Weiss) was implemented on the Yahoo music dataset and compared with other clustering algorithms

C/C++ **Bash emulator** 🤖 A part of MIPT third semester CS course
An emulator of the GNU Bash was written on C++

C **PDP-11 emulator** 🤖 A part of MIPT second semester CS course
An emulator of the PDP-11 16-bit minicomputer was written on C

Coursework

Mathematics Probability Theory*, Optimization Methods*, Computational Mathematics*, Calculus (I, II, III, IV), TFCV*, Functional Analysis*, Linear and Abstract Algebra, Algorithms and Models of Computation, Discrete Analysis, Basics of Statistics

Computer Science Python Programming, Deep Learning (specialization by deeplearning.ai) *see certificates*, Hardware/Software Interface, Operating Systems (GNU/Linux), OOP (C/C++)

* - to be completed by Feb 2020

Hobbies & Interests

Playing the guitar, English and Russian literature in the original, languages in general

Languages

English (Fluent), French (Basic), Russian and Tatar (Native)