

MAXIM ZUBKOV

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Moscow, Russia

EDUCATION

Moscow Institute of Physics and Technology
Bachelor
Department of Control and Applied Mathematics
Chair of Data Analysis, Yandex

2017 - 2021
Overall GPA: 8.05/10.00

TECHNICAL KNOWLEDGE

Programming Languages	Python(4/5), C/C++(3/5), SQL(4/5), JavaScript, CSS, HTML(3/5)
Frameworks	Numpy(4/5), Matplotlib(3/5), Pandas(5/5), SkLearn(4/5), CVXPY (2/5) NLTK(2/5), Gensim(3/5), FastText(2/5), SpaCy(2/5), PyTorch (3/5) XGBoost (2/5), CatBoost (2/5), Multiprocessing(2/5), Dash(3/5), ReactJS(3/5) Django(2/5)
Software & Tools	LaTeX, Git, Bash, Linux, MS Office, Jupiter, Zeppelin, Postgres, MongoDB, GoogleColab, Anaconda
Soft Skills	Advanced English, Presentation, Leadership, Teamwork, Time Management

PROJECTS AND COURSE WORKS

[Shell-like extensions](#) September 2018 - October 2018

- ls, cp command implementation; Piping the result of one process to another; Posix and sys5 semaphores

[Users behavior analyzer](#) February 2019 - May 2019

- Analysis was based on the users transfers between web-pages
- To estimate how current users' behavior differs from normal, different methods were checked and the best performance was shown by Markov Chains with Hidden States
- Also we developed Google Chrome extension and launched a server that provide multi-user mode for our service

C++ advanced algorithms March-May 2019

- [Clique problem](#): Optimizing of NPC problem of finding Clique using Meet In The Middle and Branches and Bounds algorithms
- [Fast Fourier Transform](#): Implementation of Polynomial class, multiplication, exponentiation using Fast Fourier Transform
- [Graph Planarity](#): Check the graph planarity using Gamma Algorithm

Image Imapainting October-December 2019

- We work in the group of two and firstly done a paper review on the topic of image inpainting and GANs in general, then we trained U-net like model and tried to improve them by combining and customizing loss functions and choosing hyperparameters. The dataset we choose was "Architecture dataset" and as mask we just add square with random noise in the particular area of the photo.

Superconducting Quantum Interference Device (SQUID) December 2019 - January 2020

- Course project on quantum effects in superconductor causing magnetic flux quantization and applications of this effect

WORK EXPERIENCE

Tinkoff July 2019 - August 2019

- I took part in developing new recommendation system, based on NLP approaches. Our main idea was that users transactions can be considered as words in sentence and thus NLP methods can be applied. The system we build turned out to be capable to cluster users by their material condition.

COMPETITIONS AND ACHIEVEMENTS

VK Hack

September 2019

- At the hackathon, it was proposed to implement mobile app for the Pushkin Museum with a voice assistant, the ability to listen to audio guides and navigate through museum. I performed as a leader of the team

CET-MIPT Hack

September 2019

- At the hackathon, the task was to find oil for a given set of logs (time series), and then chose the best strategy for its extraction. I performed as a leader of the team

RELEVANT COURSES

Theoretical Courses

Calculus, Complex Theory and Lebesgue Measure
Linear Algebra and Abstract Algebra
Ordinary and Partial Differential Equations
Functional analysis
General and Theoretical Physics
Probability Theory ([Coursera](#)) and Applied Statistics
Convex Analysis and Optimization Theory
Bioinformatics (currently passing)

Programming and CS Courses

Introduction to Machine Learning ([Coursera](#))
Operating Systems
Object-Oriented Programming in C++
Huawei Computer Vision Course
Algorithms, Data Structures and Computation Models
Python Language ([Coursera](#))
DeepLearning Course [dlcourse.ai](#)
[DL in NLP](#), ABBYY
Full-stack Web Development with React ([Coursera](#))