# MAXIM ZUBKOV

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#### **EDUCATION**

Moscow Institute of Physics and Technology

2017 - 2021

Bachelor

Overall GPA: 8.0/10

Department of Control and Applied Mathematics

### TECHNICAL KNOWLEDGE

Programming Languages

C/C++ (4/5), Python (4/5), SQL (4/5)

**Frameworks** 

Numpy (3/5), Matplotlib (3/5), Pandas (3/5), SciPy (3/5), Requests (3/5)

BeautifulSoup (2/5), Asyncio (3/5), STL (4/5), PyQt (1/5)

Software & Tools

LaTeX, Git, Bash, Linux, MS Office, Jupiter, Postgres

Soft Skills

Advanced English, Presentation

#### **PROJECTS**

Shell-like extensions

September 2018 - October 2018

- · ls, cp command implemention
- · Piping the result of one process to another
- $\cdot$  Posix and sys5 semaphoes

Users behavior analizer

February 2019 - Now

- · The main idea is to analyze the users behaviour according to his transfers between web-pages
- · To calulate the probabilito of current user to transfer from one web-page to another we used Markov Chains with Hidden Sates
- · Also we developed Google Chrome extension and launched a server that provide multi-user mode

Clique Problem March 2019

- · Meet In The Middle algorithm
- · Branches and Bounds algorithm

Fast Fourier Transform April 2019

· Implemention of Polynomial class, multiplication, exponentiation using Fast Fourier Transform

Tic-Tac-Toe April 2019

· Implemention of Tic-Tac-Toe AI using Monte-Carlo Tree Search

Graph Planarity May 2019 - Now

- · Check the graph palanrity using Gamma Algorithm
- · Planned for the future to add the graph drawing

#### RELEVANT COURSES

#### **Mathematical Courses**

Calculus

Linear Algebra

Differential Equations

Combinatorics

Graph Theory

Abstract Algebra

Lebesgue Measure

Probability Theory

Physics

Analytical Mechanics

Advanced Abstract Algebra and Number Theory

## Programming and CS Courses

Introduction to Machine Learning (Coursera)

Operating Systems

Object-Oriented Programming in C++

Relational Database Architecture

Formal Languages

Algorithms and Data Structures

Advanced Algorithms and Computation Models

Automata Theory

Python Language (Coursera)

Asynchronous Programming