KROO DMITRY

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EDUCATION

Moscow Institute of Physics and Technology (MIPT)   *2018 - Present*
Bachelor in Applied Mathematics and Computer Science
Department of Innovation and High Technology

ACADEMIC INTERESTS

Mathematical Logic, Algorithm Theory, Machine Learning

TECHNICAL SKILLS

Programming Languages: Python, C++, SQL
ML & Data Analysis: NumPy, Pandas, SciPy, SciKit-Learn, MatPlotLib, Plotly, Gensim, XGBoost, LightGBM, CatBoost
Databases: Postgres, Greenplum
Other Software: git, Linux, Excel, PowerPoint, LaTeX, Photoshop, SketchUp
Language: Russian (Native), English (Upper-Intermediate)

MAIN PROJECTS

A chatbot for MIPT admissions comitee
Completed as a part of MIPT Endowment Fund Hackathon (2020). The task was to create a chatbot to help enrolees find useful information on the admission comitee website. I was responsible for processing users' questions and finding the appropriate section on the website or an already existing expert's answer. Our team was declared the winner in that nomination.

A palletization algorithm
Completed as a part of Unilever Chain Reaction Hack 2018. The task involved the development of an algorithm for packing goods into boxes and boxes onto pallets, taking into account restrictions such as fragility of the goods, the maximum size of the box/pallet, allowable positions of the goods, etc. Goods' dimensions and restriction flags were the input and a description of the boxes layout was the output. The algorithm worked well; however our lack of experience in 3D visualisation and economic calculations prevented us from taking any prize that time.

A coding algorithm
The project was completed in the first semester as a part of Algorithms and Data Structures course at MIPT. I used Adaptive Huffman algorithm to encode and decode data.

UNIVERSITY COURSES COMPLETED

Math: Calculus 1-3, Algebra and Geometry, Group Theory, Mathematical Logic and Algorithm Theory, Combinatorics and Number Theory, Discrete Analysis 1, Discrete Structures and Algorithms in Topology, Differential Equations 1, Diophantine Approximations, Measure Theory

Programming: Algorithms and Data Structures, Object-Oriented Programming (C++), Python Practice, Formal Languages and Translations, Databases

ACHIEVEMENTS

- 2nd prize in **Moscow Mathematical Olympiad**, 2018

- 1st prize in **Kurchatov Olympiad in Mathematics**, 2018

- Winning team on **MIPT Endowment Fund Hackathon**, 2020

- Finalist on **Unilever Chain Reaction Hack**, 2019

OTHER ACADEMIC ACTIVITIES

"Mathematics and Python For Data Analysis" online course by Yandex and MIPT

"Supervised Learning" online course by Yandex and MIPT

"Data Science in Consulting" offline course by McKinsey&Company

Attended RAII Summer School on Artificial Intelligence, 2019

PERSONAL TRAITS

I am very responsible and can process information and gain new skills pretty fast. I also have a strong motivation for my work to be done perfectly.