# Slava Chekmenev

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## Education

| 2017 – 2020 | 🔖 | **High School,** Physics and Mathematics Lyceum №1580 at the Bauman Moscow State TU |
| 2020 – ···· | 🔖 | **3rd year B.Sc, Moscow Aviation Institute** Applied Mathematics and Computer Science. |

## Skills

| Maths | 🔖 | Probability, Statistics, Calculus, Linear Algebra, ODE, Real Analysis, Optimization, Numerical Methods. |
| coding | 🔖 | python, C, C++, SQL |
| ml&dl | 🔖 | Neural Network Architectures for CV, NLP, RecSys; pytorch, tensorflow, sklearn, xgboost, lightgbm, catboost, pandas, numpy, sympy, scipy, matplotlib, seaborn. |
| mlops | 🔖 | docker, git, github, gitlab, mlflow, DVC, CI/CD |
| Misc. | 🔖 | Algorithms and Data Structures, Linux, LaTeX, PostgreSQL, MongoDB. |

## Projects

| classic ML | 🔖 | Conducted EDA and classification to determine permit approval/denial for landscape modifications in San Francisco. Overcame challenges of messy data obtained from the city's official website through advanced cleaning. Extracted the most informative features and applied advanced classification algorithms to optimize the landscape modification permit process. **Stack**: Sklearn, PyTorch, XGBoost, Catboost. 🜨 code |
| classic ML | 🔖 | Decision tree and random forest algorithms to create a predictive model for successful completion in MOOC courses, data-driven decision-making to optimize course completion rates, therefore advancing analytics in the online education landscape. **Stack**: Sklearn, pandas, matplotlib, seaborn. 🜨 code |
| Fin Math | 🔖 | Implemented diverse financial mathematics curves and mathematical models for derivative financial instruments in C++, facilitating precise calculations and analysis. Contributed to the development of advanced tools for financial decision-making, optimizing risk management and investment strategies in the realm of derivatives. **Stack**: C++ STL, SciPy, SymPy. 🜨 code |
| Audio | 🔖 | Developed a program utilizing the Cooley-Tukey algorithm for Fast Fourier Transform, enabling efficient audio search. Significantly enhanced computational speed and accuracy for analyzing signals, empowering rapid identification and retrieval of specific audio patterns or features. **Stack**: C++ STL. 🜨 code |
| NLP | 🔖 | Utilized language grammatics to analyze human queries in family trees, enabling accurate interpretation and efficient search capabilities. Enhanced genealogical research by applying advanced linguistic techniques for precise and intuitive navigation within family tree databases. **Stack**: Prolog, python. 🜨 code |
| Algorithms | 🔖 | Dijkstra's algorithm for finding shortest paths in a graph with GUI. **Stack**: C++ STL, C. 🜨 code |
| Low-level | 🔖 | Multithreaded client-server system for instant or delayed message sending. **Stack**: C, ZeroMQ. 🜨 code |
| Web | 🔖 | Web application for computer assembly. **Stack**: Django, HTML, CSS. 🜨 code |

## Specialized Courses and Misc.

| Math | 🔖 | **I am a Professional. Math**. Passed to the final stage. |
| AI, Math | 🔖 | **I am a Professional forum**. Selected to MIPT Edu Forum on AI, Maths and Physics in April 2023. |
| ML | 🔖 | **mlcourse.ai**. Did all home assignments and individual project: `code link` |
| ML, DL | 🔖 | **Deep Learning School** advanced stream, part 1 – computer vision. |
| DS, ML | 🔖 | **Introduction to Data Science and Machine Learning** course on stepik. `Certificate link` |
| Statistics | 🔖 | **Basics of statistics** course on stepik: `part1 link` and `part2 link`. |
| ML, python | 🔖 | Passed Kaggle courses: **pandas** `Certificate link` and **Intro to Machine Learning** `Certificate link`. |
| C and C++ | 🔖 | **Basics of C programming** course `Certificate`; **Introduction to Programming (C++)** `Certificate` |