

Министерство науки и высшего образования
Российской Федерации

To whom it may concern

федеральное государственное автономное
образовательное учреждение
высшего образования
«Московский физико-технический институт
(национальный исследовательский университет)»
(МФТИ)

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на № _____ от _____

Fyodor Batchkala has successfully completed the course “Mathematics for Data Science” by Moscow Institute of Physics and Technology.

Topics covered:

1. Discrete Mathematics (Sets, Mathematical Logic, Combinatorics and Probability)
2. Linear Algebra and Analytic Geometry (Systems of Linear Equations, Vector Spaces, Vectors, Mathematical Operations with Matrices (addition, multiplication), Linear Transformations, Matrix Calculus)
3. Mathematical Analysis (Functions, Sequences and Limits, Differential Calculus, Integral Calculus, Gradient and Optimisation)
4. Probability Theory (Probability Theory Fundamentals, Bayes' Theorem, Discrete Random Variables, Continuous Random Variables, Expected Value, Standard Discrete (Bernoulli, Binomial, Poisson) and Continuous (Uniform, Exponential, Normal) Distributions)
5. Mathematical Statistics (Point Estimation, Confidence Intervals, Hypothesis Testing, Correlation Analysis, Linear Regression)

Commitment: approximately 128 hours (lectures, seminars, and coursework)

Course Dates: 11.08.2020 - 26.10.2020

Director of MIPT-School of Applied
Mathematics and Computer Science,
Head of Discrete Mathematics Department,
Head of the Laboratory of Advanced
Combinatorics and Network Applications,
Head of the Laboratory of Applied
Research MIPT-Sberbank

Andrei M. Raigorodskii