Firuza Mamedova

Education

09/2020–09/2021   **MSc in Data Science**, *London School of Economics.*
Relevant Courses:
- Machine Learning and Data Mining
- Artificial Intelligence and Deep Learning
- Distributed Computing for Big Data
- Data Analysis and Statistical Methods
- Bayesian Machine Learning
- Managing and Visualizing Data

06/2018   **PhD in Pure Mathematics**, *Leibniz University Hannover.*
Thesis Title: *Equivariant Indices of Vector Fields and 1-Forms on Varieties*
Supervisor: *Prof. Dr. Wolfgang Ebeling*
Grade: *magna cum laude*

06/2012   **Specialist in Mathematics**, *Lomonosov Moscow State University.*
Diploma with Honours, GPA: *4.8/5.0*

Work Experience

since 12/2020   **Capstone Project**, *Capgemini and London School of Economics.*
- Revealing genes linked to tumor cells using different combinatorial optimization techniques

10/2018–06/2020   **Assistant Actuarial Developer**, *Hannover Re.*
- Developed and maintained actuarial modelling systems
- Integrated new accounting requirements (IFRS 17) into existing risk models

08/2016–09/2018   **Research Associate**, *Institute of Algebraic Geometry, Leibniz University Hannover.*
- Conducted research in Singularity Theory and Algebraic Geometry
- Presented results at research seminars and international conferences
- Taught and prepared problem sessions for courses "Algebraic Geometry" and "Mathematics for Engineers II"

10/2015–07/2016   **Visiting Scholar with a Research Grant from the German Academic Exchange Service (DAAD)**, *Institute of Algebraic Geometry, Leibniz University Hannover.*
- Conducted research in Algebraic Geometry

10/2012–07/2015   **Junior Research Fellow**, *Department of Mechanics and Mathematics, Lomonosov Moscow State University.*
- Conducted research in Differential Topology

Publications

[1] F. I. Mamedova. Simplest singular points of 1–forms invariant with respect to an action of group of order three. *Moscow University Mathematics Bulletin*, 73(5):199–202, 2018.

Flat 2, 41 Maclise Road – W14 0PR – London
☎ *+44 7762 222 274* • ✉ *firuza.mamedova@gmail.com*
in *firuzamamedova* • ⌭ *jeleznayadeva*

[2] F. I. Mamedova. *Equivariant indices of vector fields and 1-forms on varieties.* PhD thesis, Hannover: Institutionelles Repositorium der Leibniz Universität Hannover, 2018.

[3] S. M. Gusein-Zade and F. I. Mamedova. On equivariant indices of 1-forms on varieties. *Functional Analysis and Its Applications*, 51(3):177–184, 2017.

Technical Skills

Python	Main language, experience with Pyspark, Scipy, Numpy, Tensorflow
C/C++	Professional experience and 4 years of practice during the undergraduate studies
R	Professional experience
Mathematical	Undergraduate classes taken include: ○ Statistics, ○ Stochastics, ○ Probability, ○ Numerical Methods, ○ Optimal Control
SQL	Basic experience
MS Office	Improved models of reinsurance treaties in Excel

Languages

English	fluent
German	fluent
Russian	native