# Sergey Barseghyan

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#### **EDUCATION**

## Moscow Institute of Physics and Technology, Dolgoprudny, Russia

- B.S. in Applied Math and Physics (Phystech School of Fundamental and Applied Physics)
  - Relevant Coursework: Computational Methods of Theoretical and Experimental Physics, Probability, Partial Differential Equations.

#### Ayb High School, Yerevan, Armenia

## RESEARCH **EXPERIENCE**

# Laboratory of High Energy Physics, MIPT

- Undergraduate Research Student, Theoretical Department
  - Supervisor: Prof. Emil T. Akhmedov
  - Focus: Quantum Field Theory in curved space-time .

#### WORK **EXPERIENCE**

## ThunderBid Trading Limited, Moscow, Russia

- Quantitative Researcher
  - Developed and modified HFT algorithm that increased company's returns by 10%

#### Private Tutor, Moscow, Russia

Mar 2017 – Present

Jul 2019 - Present

- Mathematical Analysis, General Physics, Theoretical Mechanics, Probability, Machine Learning
- · Besides teaching to bachelor and high school students I have been consulting specialists in matters of physics and mathematics for their projects

#### Laboratory of High Energy Physics, MIPT

Research Technician

Jul 2017 – Present

 Reporting on seminars and schools, editing problem book on mathematical methods of quantum field theory

#### **AWARDS**

- Trinity College Firefighting Robot Competition (top 5 out of 200 competitors and prize for best design) Hartford, Connecticut, USA Apr 2013
- Armrobotics Linetracking robot competition (First Prize)

Nov 2012

McKinsey Biggame Case Championship (2nd Place)

- Nov 2017
- Double Champion in Powerlifting among university students in Moscow

#### 2018 & 2019

#### SCIENTIFIC **ACTIVITY**

• Regular reporter on scientific seminar on gauge theories and strings

Sep 2018 – Present

- Lecturer on the school "Algebraic and Geometric Methods in Mathematical Physics", Scientific Secretary on International School of Subnuclear Physics, Erice, Sicily, Italy
- Sep 2017 Jun 2017

# **SCHOOLS & CONFERENCES**

- Wolfram Summer School Armenia 2016, Wolfram Research
- International School "Advanced Methods of Modern Theoretical Physics: Integrable and Stochastic Systems" Dubna, Russia
- "String theory, integrable models and representation theory 2019"Skoltech, Moscow

#### **ONLINE COURSES**

- Coursera: Art of C++ Development: White Belt from Yandex and MIPT
- Coursera: Machine Learning and Data Analysis: Supervised Learning from Yandex and MIPT
- Coursera: Machine Learning and Data Analysis: Mathematics and Python from Yandex and MIPT
- Stepik: Programming on Python from Bioinformatics Institute
- Stepik: Investment Banking from Inside from European University at St. Petersburg
- Stepik: Introduction to Linux from Bioinformatics Institute

#### **LANGUAGES**

- English: Fluent. Russian: Native.
- Armenian: Native.

# **TECHNICAL SKILLS**

TEX, LATEX, Mathematica, R, Python, C, C++, SQL, Numerical Methods, Fortran, Linux

**INTERESTS** 

Judo, Chess.