

# EKATERINA IVSHINA

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## EDUCATION

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### Princeton University

September 2019 - Present

*Bachelor of Arts in Physics* (minor: Statistics and Machine Learning)

Coursework: Honors Linear Algebra, Accelerated Honors Analysis, Applied Algebra, Probability Theory, Quantum Mechanics, Classical Mechanics, Electromagnetism, Thermal Physics and Statistical Mechanics, Research Methods in Astrophysics, Java Programming, Integrated Science Curriculum, Introductory Logic, Microeconomics

### Specialized Scientific and Educational

#### Center of Ural Federal University

September 2016 - June 2019

*High School Diploma* (Physics & Mathematics Concentration)

Ekaterinburg, Russia

GPA: 4.0/4.0; SAT Math II: 800/800; SAT Physics: 800/800

#### Music School #16

September 2010 - June 2016

Concentration: Music Performance

Ekaterinburg, Russia

GPA: 4.0/4.0

## RELEVANT EXPERIENCE

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### Harvard Medical School, Martinos Center for Biomedical Imaging, Intern

June 2020 - August 2020

- Implemented GANs, CNNs, and Computer Vision techniques for motion correction & denoising of diffusion MRI
- Performed training on a computing cluster

### Princeton University, Mathematics Department, Teaching Assistant

August 2020 - Present

- Lead problem solving sessions for the "Single Variable Analysis with an Introduction to Proofs" and "Honors Linear Algebra" classes

### Princeton Dining Services, Student Worker

January 2020 - April 2020

- Tasks included cleaning up the salad bar, the hot foods bar, wiping the tables, sweeping floors, and a general wrap-up for the front of dining area

### Engineering Summer Academy at Penn, Robotics program (grade: A+)

July 2018

- In team, designed in SolidWorks & programmed in Arduino a guitar playing robot from scratch (received A+)

### Astrophysics Research Assistant, Kourvka Observatory, Russia

August 2018 - December 2018

### European Summer Program on Rationality, Oxford, UK

August 2019

### Yale Young Global Scholars Program, Engineering Session

June 2018

### Summer Research Intern, National Research Nuclear University MEPhI, Moscow

June 2018

### Engineering Research Intern, Sirius Educational Center, Sochi, Russia

February 2018

### MIT Global Teaching Labs, Cryptography Course (grade: A)

January 2018

## CONFERENCES

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- "Space Physics" All-Russian college-level conference (Ural Federal University, Russia, 2018)
- National Winter School of Young Astronomer (Lomonosov Moscow State University, Russia, 2018)
- "Scientists of the Future" Research Conference (Lomonosov Moscow State University, Russia, 2018)

## ACCOMPLISHMENTS

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- Euro-Asian Astronomical Society Award (2018)
- Winner, "Scientists of the Future" international research competition (INTEL ISEF qualifying fair, 2018)
- Medal "For Outstanding Achievements in Studying" issued by the Ministry of Education of Russia
- All-Russian Astronomy Olympiad - ranked top 3 in state, top 50 nationally (2018, 2019)
- "PhysTech" National Physics Olympiad bronze medalist
- Invited to showcase my research to Prime Minister of India and President of Russia (2018)
- 20+ national and state awards for achievements in playing the Domra, a Russian folk string instrument