UranMaimekov

Curriculum Vitae



Education

Present Master of Science in Mathematics and Physics, Department of Bio-Medical Physics, Moscow Institute of Physics and Technology (National Research University), Moscow, Russia.

Specialization: Bioinformatics and System Biology

2015–2018 Bachelor of Science in Mathematics and Physics, Department of General and Applied Physics, Moscow Institute of Physics and Technology (National Research University), Moscow, Russia.

Specialization: Biophysics

2008–2015 High school, Physical and Mathematical lyceum 61, Bishkek, Kyrgyzstan.

Research and Work Experience

Present MSc qualification work. Scoltech iMolecule, Skoltech, Moscow.

Research project: Machine learning in molecular dynamics

31.07.20 **Summer online school: Al for medical images**, Innopolis, Sochi, Kazan, Russia.

27.07.20 Computer vision and analysis of medical images, their modality

summer 2019 Internship, IST Austria Vienna.

Sazanov group: Structural biology of membrane protein complexes

- Optimize particle picking on cryo-EM micrographs.
- Use particle picking programs based on NNs
- Write scripts in Python and Bash to optimize the work and results
- 2019.07 **BSc qualification work**, Department of Biophysics, MIPT, Moscow.
- 2018.08 **Project:** Study the influence of the antioxidants on mitochondria health in the oxidative stress conditions
 - Study the behaviour of mitochondria using fluorescent dyes
 - Analyze cytometer and microscope results
 - Obtain images of treated cell from fluorescent microscopy
 - Using ImageJ (Fiji) to process the images of chromosomes and telomeres
- 2018.10 **61st MIPT Scientific Conference**, Dolgoprudny and Moscow.
 - Poster on the topic "Research the antioxidants influence on the telomeres length"
- summer 2017 Internship, Laboratory of Ion and Molecular Physics, MIPT, Moscow.

Research project: The application of tandem mass spectrometry to identify molecular biomarkers for early diagnosis of Alzheimer's disease

Each year MIPT olympiads in physics and math.

- Organize olympiads
- Student jury
- 2016 Maxwell Olympiad in physics, Sochi, Russia.
 - Student-jury of the final step of physics olympiad

Awards

- 2018 Prize for the best poster, 61st MIPT Scientific Conference, Moscow, Russia.
- 2015 46th IPHO, International Physics Olympiad (IPhO), Mumbai, India.
- 2015 Absolute place, National Physics Olympiad, Bishkek, Kyrgyzstan.
- 2014 2nd Place, National Physics Olympiad, Bishkek, Kyrgyzstan.

Technical Skills

Programming Github: **UranMai**, Python (PyTorch, Scikit-learn, NumPy, Plotly, etc.), LATEX,

Bash, R, SQL, Git, Flask

Own projects Covid19 spread-map (Plotly, Folium),

Cancer images (CV),

IMDB Movie reviews (NLP)

Scientific Docking software: ICM Pro, Smina; Life Sceince: Fluorescence confocal microscopy,

skills PCR, Gel Electrophoresis

Online Machine Learning, Deep Learning (Andrew Ng, Coursera), Statistics

courses

Languages

Kyrgyz Fluent

Russian Fluent

English Upper-Intermediate (B2/C1)

German Intermediate (A2/B1)