



KHORUZHII KIRILL

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EDUCATION

Bachelor of General and Applied Physics | *in process*

Moscow Institute of Physics and Technology | GPA: 4.9 (9.1/10.0); Top 10%

2019 – until now

Moscow, Russia

WORK EXPERIENCE

Laboratory Assistant

Academic University, Renewable Energy Laboratory

- Spraying coatings
- Measurement of sample characteristics

October 2018 – May 2019

Saint Petersburg, Russia

Software Engineer

Terra Quantum

- search and preprocessing of datasets
- NLP in dialog systems
- State of the art results review

August 2020 – until now

Moscow, Russia

Junior researcher

Russian Quantum Center, Ultracold Fermions Lab

- Laser locking with doppler-free saturated absorption spectroscopy (theory)
- Laser locking with doppler-free saturated absorption spectroscopy (experiment)

August 2021 – until now

Moscow, Russia

PROJECTS AND RESEARCH

Development of antireflective coatings based on $\text{SiO}_2/\text{Si}_3\text{N}_4$

Academic University, Renewable Energy Laboratory

- Under the leadership of Dmitry Kudryashov, a coating was obtained, with the possibility of rapid spraying
- The article (doi.org/10.1088/1742-6596/1410/1/012101) was published following the results of the activity

Spring 2019

Saint Petersburg, Russia

Development of a corporate chat bot

Terra Quantum

August 2020 – until now

Laser locking with doppler-free saturated absorption spectroscopy

Russian Quantum Center, ultracold fermions lab

- Under the leadership of Andrey Turlapov, the parameters of the observed hyperfine structure were optimized
- Theoretical model was constructed, an analytical result was obtained in the approximation of a two-level system
- A numerical result was obtained and observed for a multilevel ^7Li system

August 2021 – until now

Moscow, Russia

COURSEWORK

Mathematics: Calculus, Analysis on Manifolds, Harmonic analysis, Linear Algebra, Complex analysis, Computational Mathematics, Equations of Mathematical Physics

Physics: Mechanics, Dynamical systems and chaos, Statistical Physics I, Field Theory, Quantum Physics

Informatics: Python, C++, Machine Learning, Advanced Deep Learning, Quantum computing, Mathematica

SKILLS

Languages: Russian (Native), English (B2)

Programming: *Python* (NLP, Image Processing, Time Series Processing), *Wolfram Language*, *MatLab*, C++

Other: \LaTeX , Sublime Text, Git, Adobe Illustrator