# Aidin Biibosunov

*Curriculum vitae*

*Am Schäferanger 13/0238, 85764*
*Munich – Germany*
*(+49) 178 921 9177*
*biibosunov.aidin@gmail.com*
*aidinbii.netlify.app*
*aidinbii*

## Education

**Oct 2019 – Present** **M.S. in Mathematics**, *Technical University of Munich*, Munich, Germany

**Sep 2017 – Nov 2018** **Completed coursework towards M.S.**, *Novosibirsk State University*, Novosibirsk, Russia
In program: Physics of atoms and molecules

**Sep 2013 – Jun 2017** **B.S. in Physics**, *Novosibirsk State University*, Novosibirsk, Russia
Thesis: High precision quantum chemical calculations of kinetics of primary reactions of thermolysis of nitroalkenes

## Experience

**Mar 2022 – Sep 2022** **Research assistant**, Institute for Medical Microbiology, Immunology and Hygiene of TUM
Machine learning (ML) methods in biology
- worked with high dimensional data
- associated Bulk RNA-Seq data with various clinical outcomes of experiments with mice

Advisor: Ph.D Atefeh Kazeroonian

**Apr 2021 – Aug 2021** **Research assistant**, Helmholtz AI
Deep learning in High Content Screening (HCS) analysis
- reproduced *these* results
- used metric learning to classify microscopy cell images

Advisor: Ph.D Tingying Peng

**Jan 2021 – Mar 2021** **Internship**, Helmholtz Zentrum München
Contributed to the implementation of scGen model into *scArches*
Advisor: Mohammad Lotfollahi

**Nov 2020 –** **Computational Pathology**, *Technical University of Munich*
Seminar at the department of mathematics
- read and presented the *paper*
- reproduced the results

Advisor: Sophia Wagner

**Oct 2016 – Nov 2018** **Lab assistant**, *Voevodsky Institute of Chemical Kinetics and Combustion*, Laboratory of Mechanisms of Reactions
- designed and performed experiments (computer simulations)
- wrote reports

Advisor: Vitaly G. Kiselev

## Skills

- Programming Languages: Python (NumPy, Pandas, PyTorch), R, Java
- Tools: Git, Emacs, LaTeX

## Conferences

**Apr 2018 –** **56th International Scientific Student Conference**
Theoretical study of the new thermal decomposition channels of aliphatic and aromatic nitro compounds

**Apr 2017 –** **55th International Scientific Student Conference**
Theoretical study of the kinetics and mechanisms of thermolysis of new high-energy compounds

## Awards & Scholarships

- Sep 2013: Full-tuition scholarship with stipend for undergraduate studies
- Feb 2013: Russian Board of School Olympiads, Prize Winner in Physics

## Languages

- English: Fluent
- German: Beginner
- Russian: Fluent
- Kyrgyz: Native