Aidin Biibosunov

Curriculum vitae

Education

Oct 2019 - M.S. in Mathematics, Technical University of Munich,

Dec 2022 Munich, Germany

Thesis: Deep Learning Empowered Analysis for High Content Screening

Sep 2017 – Completed coursework towards M.S., Novosibirsk State

Nov 2018 University, Novosibirsk, Russia

In program: Physics of atoms and molecules

Sep 2013 – B.S. in Physics, Novosibirsk State University, Novosibirsk, Jun 2017 Russia

Thesis: High precision quantum chemical calculations of kinetics of primary reactions of thermolysis of nitroalkenes

Experience

Mar 2022 – Research assistant, Institute for Medical Microbiology, Im-Sep 2022 munology and Hygiene of TUM

Machine learning (ML) methods in biology

o worked with high dimensional data

o associated Bulk RNA-Seq data with various clinical outcomes of experiments with mice

Advisor: Ph.D Atefeh Kazeroonian

Apr 2021 - Research assistant, Helmholtz AI

Aug 2021 Deep learning in High Content Screening (HCS) analysis

 \circ reproduced *these* results

o used metric learning to classify microscopy cell images

Advisor: Ph.D Tingying Peng

Jan 2021 – Internship, Helmholtz Zentrum München

 ${f Mar~2021}$ 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

o read and presented the paper

o reproduced the results

Advisor: Sophia Wagner

Oct 2016 - Lab assistant, Voevodsky Institute of Chemical Kinetics and

Nov 2018 Combustion, Laboratory of Mechanisms of Reactions

- o designed and performed experiments (computer simulations)
- wrote reports

Advisor: Vitaly G. Kiselev

Skills

- Programming Languages: Python (NumPy, Pandas, PyTorch), R
 Java, Matlab
- 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

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

Languages

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