

Zhakshylyk Nurlanov

✉ zh.nurlanov@uni-bonn.de

🌐 nurlanov-zh

🌐 nurlanov-zh

☎ +49 (177) 85 05 992

EDUCATION

University of Bonn

PhD in Informatics

Topic: *Robustness of Deep Learning*, Advisor: *Florian Bernard*

Bonn, Germany

February 2022 – Present

Technical University of Munich (top 10%, with distinction)

MSc of Informatics

Thesis: *Deep Learning for Multi-Graph Matching*, Advisor: *Florian Bernard*

Munich, Germany

October 2019 – 2021

Moscow Institute of Physics and Technology (top 5%, Honour degree)

BSc of Applied Mathematics and Physics

Thesis: *Deep Learning for Speech-Driven Facial Avatar Animation*, Advisor: *Victor Lempitsky*

Moscow, Russia

September 2015 – 2019

RESEARCH & WORK EXPERIENCE

Bosch Center for Artificial Intelligence

Doctoral Student, Robust and Explainable Deep Learning

- Researching deep learning model safety and security, with a focus on foundation models

Renningen, Germany

December 2021 – Present

Computer Vision Group, TUM

Assistant Researcher, Visual-based Navigation

- Improved robustness of numerical implementation of SO3 Lie group transformation and of its Jacobian 🌐

Munich, Germany

October 2020 – April 2021

Samsung R&D Institute

Computer Vision Engineer, Bio-recognition Lab

- Developed solutions for speech-driven avatar animation and dynamic gesture recognition projects

Moscow, Russia

June 2018 – August 2019

PUBLICATIONS

- **Zhakshylyk Nurlanov**, Frank R. Schmidt, Florian Bernard (ICML Workshop 2023)
Adaptive Certified Training: Towards Better Accuracy-Robustness Tradeoffs 📄
- **Zhakshylyk Nurlanov**, Frank R. Schmidt, Florian Bernard (AAAI Oral 2023)
Universe Points Representation Learning for Partial Multi-Graph Matching 📄
- **Zhakshylyk Nurlanov**, Daniel Cremers, Florian Bernard (ICPR 2022)
Efficient and Flexible Sublabel-Accurate Energy Minimization 📄 🌐
- Glazistov I., Krotov I., **Nurlanov Z.**, Karacharov I., Simutin A., and Danilevich A. *Method for generating an animation model of a head based on a speech signal and an electronic computing device which implements it.* RU2721180C1, May 2020; KR20210070169A, June 2021. 📄

PROJECTS

Fully Event-driven Visual Odometry

Visual odometry pipeline based on tracking features from motion-compensated frames using only events



3D Face Reconstruction and Retargeting using RGB-D data

Implementation of fitting and refinement of the face model, followed by facial deformation transform



PROFESSIONAL & COMMUNITY SERVICE

CVPR, ICML, ICCV, GCPR, IEEE TNNLS, TPAMI

Reviewer, Meta-Reviewer

2022 – 2023

National Mathematical Olympiad Committee

Organizing Kyrgyz National Math Olympiads among (≈ 6000) high school students to form a team for IMO

2021 – Present