

Aman Urumbekov

+996(501)788-668 | amanurumbekov@gmail.com | linkedin.com/in/aman-urumbekov-computer-vision
github.com/Bezdarnost | [My personal page](#)

PUBLICATIONS

NTIRE 2024 Challenge on Image SR ($\times 4$): Methods and Results(CVPR workshop)

KSTU

- Developed a novel hybrid neural network by integrating Mamba (State Space Models) and Transformers, securing 13th place out of 20 teams despite limited computational resources hindering full model convergence.

EXPERIENCE

Computer Vision R&D(Part-Time)

January 2024 – Present(7 mos.)

Ik2 Sàrl

Switzerland, Morges

- Developed a Transformer-based super-resolution algorithm achieving $\times 2$, $\times 4$, $\times 8$, and $\times 16$ scaling, enhancing 10m satellite images to 62.5cm resolution. earthtodate.com (Note: the website may take a moment to load)
- Configured training processes on a parallelized system with 8 high-end GPUs.
- Devised powerful heuristics tailored to the specific nuances of super-resolution tasks.
- Created versatile Transformer-based architectures achieving $\times 4$ and $\times 10$ super-resolution, adaptable across different satellite sources and generalizable to new ones.

Data Scientist(Part-Time)

November 2022 – June 2023(7 mos.)

TheCramerProject

Kyrgyzstan, Bishkek

- Developed a new OCR algorithm capable of reading Kyrgyz language text with 99.32% accuracy.
- Trained a total of 40 individuals, including bankers and fintech employees, in the fundamentals of Computer Vision.

HONORS AND AWARDS

2x International Science-Technical Conference for Young Scientists

March 2023, March 2024

- Awarded top recognition in the top 6.9% of submissions nationwide for two consecutive years.

First Place at Datathon Summer 2023 - Northeastern University

July 2023

- Won 1 place among 27 participants with a MSLE of 0.11330 on the private metric.

First Place in Datathon for Kyrgyz Handwritten Letter Recognition

November 2022

- Won 1 place among 100+ participants with an accuracy of 99.09% on the private metric.

Fourth Place at OEMC Hackathon: EU Land Cover Classification

September 2023

- Won 4 place among 31 contenders, marked by a 0.49583 weighted F1-score.

Third Place at FinOlimp

September 2023

- Ranked in the top 3 among nearly 2,000 participants, demonstrating exceptional expertise in enhancing mobile banking security and functionality through automated personal document scanning with OCR.

EDUCATION

Kyrgyz State Technical University (GPA 3.94/4.0)

Kyrgyzstan, Bishkek

Bachelor of Data Science and Machine Learning

Aug. 2022 – May 2026(Expected)

TECHNICAL SKILLS

Languages: Python, C/C++

Frameworks: PyTorch, TensorFlow and Keras, Scikit-learn

Developer Tools: Git, Docker, Jupyter Lab

Libraries: Pandas, NumPy, Matplotlib, Seaborn, Plotly