RAMAZAN FAZYLOV

ramazankrow@gmail.com | ramazan793 | +7 999 164 24 36

Education

Moscow State University Moscow
Bachelor of Science in Applied Mathematics and Computer Science *Aug. 2019 – May 2023*

- Related Coursework: Computer Vision, Algorithms and Data Structures, Computer Architecture and Assembly, Linear Algebra, Discrete Mathematics
- Cumulative GPA: 4.68/5.0

Projects

Language Learning Website | *NodeJS, MongoDB, HTML, CSS, JavaScript* Sept. – Dec. 2018

- Designed a system that helps people to learn foreign words easily with use of visual memory
- Built back-end architecture with database interactions
- Implemented Google Images scraper to retrieve images of words that need to be learned

Computer Vision Curriculum Tasks | *Python, Jupyter Notebook* Sept. – Dec. 2021

- Implemented photo demosaicing algorithm based on Bayer filter and bilinear interpolation
- Implemented Prokudin-Gorsky's camera channel's images merging into single RGB image
- Implemented seam carving algorithm for image expanding and shrinking
- Implemented JPEG and PCA image compression
- Implemented photo panorama construction algorithm
- Implemented face points detector model based on convolutional neural network and data augmentations
- Implemented general neural network layers of PyTorch library using numpy and vectorization techniques
- Implemented birds classifier by fine-tuning pre-trained on ImageNet model
- Implemented GAN models: FCGAN, DCGAN, SRGAN
- Implemented cars detection model using technique of converting trained fully connected layers into convolutional layers
- Implemented U-Net and applied it for birds segmentation task

Experience

Computer Vision Researcher Jul. 2021 – Present
MSU Laboratory of Programming Technologies

- The goal is to automatize the work of microbiologists in measuring antibiotic resistance of bacteria
- Implemented an algorithm detecting mold puddles around antibiotic pills and measuring their radius
- Took part in developing of a desktop application for automatic antibiotic resistance detection

Skills

Languages: Python, C/C++, C#, MongoDB, JavaScript, HTML/CSS, Assembly
Natural Languages: Russian, English, Tatar
Developer Tools: Jupyter Notebook, Git, Linux, VS Code