Konstantin Kozhemiakov

Curriculum Vitae

Education

2016 – **Bachelor Student**, Lomonosov MSU, Faculty of Computational Mathematics and Cybernetics, present Laboratory of Computer Graphics & Multimedia, Moscow, Russia, GPA: 4.76.

Relevant courses:

Computer Vision

o Probability theory

Video Processing

o Discrete mathematics

o Calculus

Operating systems

o Object-Oriented Programming

o Algorithms & Algorithmic Languages

o Mathematical statistics

o Data Compression

o Linear algebra

o Complex analysis

o Computer networks

Technical Skills

Programming C, C++, Python, NASM

Languages

Applications Git, CMake, Jupyter Notebooks

Frameworks OpenCV, NumPy, TensorFlow, Keras, SciPy, Matplotlib, OpenMP, OpenGL

and libraries

Languages Russian, English (Intermediate)

Projects

2019 OpenGL Raymarching sample.

Experience in OpenGL: developed a scene with some primitives using Raymarching algorithm and Phong local shade model

2018 - VR Motion Sickness Assessment.

present Developing a method for automatic motion sickness assessment in stereo videos in virtual reality

2018 - VR180 Projection tool.

present Developing a projection tool (equirectangular – cubemap) for MSU VQMT3D Project for auto VR180 processing and artefact detection

2018 - Co-author and moderator of popular-science articles.

present 3 articles on Russian: Future of VR180, Super Resolution, Light-field cameras

2018 **Depth Map Estimator**.

Developed a plugin for VirtualDub for depth estimation in a mono video with plane parallel motion https://github.com/djowanni1/depth-map-estimator

2017 File Archiver.

Developed an universal file archiver based on the arithmetic coding and PPM methods on C/C++ https://gitlab.com/djowanni1/compressor

Additional awards

- 2016 Scored 497/500 points for the exams at university entry
- 2016 Prize-winner of the three first-level Olympiads from http://rsr-olymp.ru (numbers 41, 15 Math, 46 Physics)

- 2016 Prize-winner of the three second-level Olympiads from http://rsr-olymp.ru (numbers 4, 31, 46 Math)
- 2015, 2016 Prize-winner of the Regional stage of the All-Russian Math and Physics Olympiad
 - 2015 Participant in math tournament "XIX Kolmogorov's memory cup", Sochi, Russia

Interests

- o Computer Vision
- o Video Processing

- o Machine Learning
- \circ Analytics