

Polyarniy Nikolay

Work Experience

- Agisoft

Since April 2016

Mathematician-Programmer

PhotoScan developer. Mentor of students internship. Researching and implementing algorithms for 3D reconstruction. ([blog](#), [showcase](#))

Computer vision, OpenCL and CUDA, computational geometry.

- Transas

October 2014 - March 2016

Mathematician-Programmer

Developed server producing 3D landscape reconstruction and true orthophoto stitching from photos taken by UAV. ([presentation](#), [second presentation](#))

OpenCV, OpenCL, Python, Cython, Ceres-solver.

- Yandex.Money

February 2014 – October 2014

Software Developer (Java backend)

- DevExperts

April 2013 – September 2013

Software Developer (Java backend)

Skills

- **Computer Vision:** structure from motion, multiple view geometry, magic (like [masks transferring](#), delighting and haze removal)
- **OpenCL, CUDA:** GPU computations
- **Computational geometry, CGAL:** computations with absolute accuracy, algorithms and structures like Delaunay triangulation
- **OpenGL, WebGL:** standard shaders rendering and ray tracing
- **C++, Python, Java**

Education

- Computer Science Center
- ITMO University, Computer Technologies
- PML #239, mathematical circle, programming contests

Activities

- **Open-source:** OpenCL [modification](#) of EDISON mean shift segmentation. Contributions to OpenCV, PyOpenCL and others. Implemented Python bindings for OpenCL algorithms in OpenCV. GPU monitoring in i3pystatus. Was a developer of [jtalks.org](#) project (administration control component).
- **Hackathons:** four awards on hackatons. [HackEdu](#) by JetBrains (third place), [Hackday#36](#) (Autodesk 3D-web nomination), [Science Hackday #2](#) (Startup nomination). Participation in [Junction 2016, 2017](#). Third place on [HackCV](#) (traffic signs recognition).
- **Mathematical circle:** PML #239 mathematical circle teacher, SPb school team mentor, mathematical contests volunteer.
- **Programming teacher:** PML #239 programming teacher: [9-1](#), [10-1](#), [11-1](#) in winter 2016/2017, 9-2 since september 2017.
- **Programming contests:** contests organization and participation.

Contacts

- PolarNick239@gmail.com
- PolarNick.com
- [GitHub](#)
- [LinkedIn](#)



Last updated: 19.03.2018