Iovlev Yuliy

Birthdate: 19 May 1995
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Education

2013 – 2017: Tomsk Polytechnic University,

Bachelor's degree in Computer Science. Graduate diploma.

2017 – 2019: Tomsk Polytechnic University,

Master's degree in Computer Science. Diploma with honors.

Working experience

2019 – Present: Rubius

Full Stack Software Engineer.

- Support microservices architecture in Google Cloud Platform, collecting and analysis metrics via BigQuery and DataStudio (Docker, Kubernetes, Gcloud, Python).
- Implementing effective algorithms for visualization large point clouds ($\approx 5 \cdot 10^7$ faces) in browser (WebGL, Three.js, GLSL).
- Developing tools for processing and manipulation with large point clouds using such technics like octrees and levels of details (React.js, Node.js, Three.js).
- Skeletal animation. Implementing web interface for manual point cloud and 3d hand model adjusting (Three.js, GLSL).

Key technologies: JavaScript, React.js, Node.js, Three.js, WebGL, MySQL, PostgreSQL.

2017 – 2019: Rubius

Software Developer.

- Implementing algorithms for processing data from the Intel RealSense Depth Camera, detecting light sources on the obtained images (C++, OpenCV).
- Support and developing hand pose estimation utility based on images and depth maps (C++, Assimp, PointMatcher, Python).
- Large point clouds ($\approx 5 \cdot 10^7$ faces) preprocessing, labeling, segmentation, planes detection (floor, ceiling, walls, etc). Introduced multithreading computation and loading source data.
- Implementing panorama stitching algorithm for indoor navigation software (OpenCV).

Key technologies: C++, Python, OpenCV, Boost, Assimp, OpenGV, Docker, Linux.

Technologies

Programming languages: JavaScript, C++, Python, T-SQL, C#.

Database management systems: MsSQL, MongoDB, MySQL, PostgreSQL.

Technologies: JavaScript (React.js, Vue.js, Three.js), C++ (Boost, STL), Node.js (express.js, koa.js, total.js), Docker, WebGL, HTML5, CSS3.

Version control systems: Git, Mercurial.

Key awards

- Finalist of international artificial intelligence programming contest Russian AI Cup 2020;
- Participant of an ACM ICPC Semi-finals NEERC (5 times from 2013 to 2017, as a member of Tomsk PU team);
- Multi-time winner and top-3 in University and Regional students programming contests (from 2016 to 2019).

Languages

Russian (native), English (technical, intermediate).