SERGEY USHAKOV

DATE OF BIRTH: July 6, 1988
NATIONALITY: Russian

LANGUAGES:
- Russian (native)
- English

CONTACTS
Phone number: +7 985 796 03 93
E-mail: ushakov.sergey.sergey@gmail.com
Web: https://sergeyushakov.com/

AREA OF INTEREST:
Computer vision, image processing, 3d graphics, machine learning, game development

EDUCATION:
Lomonosov Moscow State University, Faculty of Computational Mathematics and Cybernetics, graduate (2008-2013)

PROGRAMMING SKILLS:
- strong knowledge of the OOP and design patterns
- programming languages: C++, Python, JavaScript, C#
- operating systems: Microsoft Windows, UNIX/Linux family, iOS, Android
- parallel programming: OpenMP, CUDA
- C++ libraries: STL, boost, PCL, OpenCV, Qt, CGAL, Eigen
- Python libraries: TensorFlow, Keras, SciKit Learn, Pandas, Flask
- game engines: Unreal Engine, Unity, ThreeJS,
- version Control System: GIT, Perforce, SVN

RESEARCH AND DEVELOPMENT EXPERIENCE:
- image alignment for making panoramas;
- image stitching via energy minimization and Laplacian pyramids;
- gender classification of Face Images;
- interactive image segmentation via graph cuts;
- car number recognition;
- ISM algorithm porting for Point Cloud Library;
- Trimble Code Sprint. Research and Implementation of the segmentation algorithms for Point Cloud Library;
- Honda Research Institute Code Sprint. Fast 3D cluster recognition of pedestrians and cars in uncluttered scenes for Point Cloud Library;
- human scanning application using Kinect, Intel RealSense and Structure IO depth cameras;
- computer vision system for seam detection, positioning and welding using depth cameras and profile sensors;
- computer vision system for stamping detection and positioning using depth cameras and profile sensors;
- fiber tip tracking system for medical endoscopes;
- real-time kidney stone detection and classification system for endoscopic cameras.

SERGEY USHAKOV

EMPLOYMENT AND WORK EXPERIENCE:

November 2013 – May 2014

C# Developer, Cyberline Racing Project, Magicindie Softworks, Chisinau

- special effect development;
- shader programming;
- social media integration (Facebook, GameCenter);
- development of game's physics engine;
- user interface programming;
- prototyping and implementation of gameplay elements.

May 2014 – May 2015

Software Developer, United 3D Labs, Moscow

- full support of all company projects;
- application development using Unity;
- mobile application development;
- development of the engine for interactive floor systems;
- company legacy projects maintenance.

May 2015 – December 2017

Computer Vision Engineer at ShareCloth Scanner Project, GlobeDrobe, Moscow

- research and development in the field of computer vision;
- development of a human scanning system to obtain a textured polygonal model;
- depth camera calibration;
- surface reconstruction;
- automated texture coordinates unwrapping;
- image processing and texture generation;
- anthropometric measurements automation;
- automation of generating skeletal animation of a scanned model;
- API development for network interaction with computer vision system.

December 2017 – pres.

Computer vision lead engineer, IPG Photonics, Moscow

- drawing up technical requirements and software requirements specification;
- software development processes organization (DevOps, CI);
- task setting, evaluation and performance overseeing;
- job applicants interviewing;
- software architecture design;
- research and development in the field of computer vision;
- software development.

SERGEY USHAKOV

PRIVATE PRACTICE & ENTREPRENEURSHIP:
2016 – pres.

Private practice and entrepreneurial activity in the field of software development, NonCasualGames, Moscow

Each project in private practice goes through several stages from approval to completion. During each stage, I am involved in both organizational activities and development. Below is a typical list of my responsibilities for each stage of the project.

Project coordination:

- presentation to potential customers;
- discussion of the upcoming project and requirements gathering;
- assessment of technical capabilities;
- possible solutions proposal;
- technology stack selection;
- equipment selection;
- drawing up technical specifications;
- assessment of budget and implementation deadlines;
- drawing up commercial proposal;
- signing an agreement.

Implementation:

- communication with the customer and other contractors;
- solution development;
- search and attraction of additional employees (if necessary).

Completion:

- commissioning works;
- presentation of the implemented solution;
- closing documents signing;
- invoicing;
- support and follow-up of the project after completion.