### **Iurii Efimov**

28a, Pervomayskaya st, Apt 20, Dolgoprudny, Moscow region, 141701, Russian Federation Tel: +7 (915) 158-8069, e-mail: yuri.efimov@phystech.edu, skype: gagarinsname

## **Education** Moscow Institute of Physics and Technology

M.S. in Computer Science

Sep 2016 – present

Research areas: image processing, computer vision, deep learning, iris recognition.

B.S. in Applied Mathematics and Physics

Sep 2012 – Jun 2016

Bachelor thesis: Iris image segmentation by paired gradient method with pupil border refinement.

GPA: 4.74 / 5.0

Strong background in algorithms, linear algebra, mathematical statistics.

# **Experience**

### Samsung R&D Institute Russia

## **Research Developer**

Nov 2016 – present

Project: Iris Recognition Project.

Results: Iris anti-spoofing algorithm for different types of spoofing attacks is developed and implemented. Quality assessment module implemented.

## Research institute "Aerokosmos"

### **Research Developer**

Nov 2015 - Oct 2016

Project: Methods of improving the spatial resolution of aerospace images.

Results: Implemented solutions show high accuracy in comparison to state-of-the-art methods.

#### **Publications**

#### **Journals**

<u>Y. Efimov</u>, I. Matveev, "Locating external and internal borders of the iris in eye image by paired gradients method" *Journal of Machine Learning and Data Analysis*. 2015. Vol.1. N 14. **URL:** http://jmlda.org/papers/doc/2015/no14/Efimov2015IrisBorderRecognition.pdf

<u>Y. Efimov</u>, I. Matveev, "Iris image segmentation by paired gradient method with pupil boundary refinement" *Information Technologies*. Vol. 23, No. 4. 2017.

V. Chigrinskiy, Y. Efimov, I. Matveev, "Fast algorithm for detecting pupil and iris boundaries" *Journal of Machine Learning and Data Analysis*. Vol. 2, No.2. 2016. **URL:** http://jmlda.org/papers/doc/2016/JMLDA2016no2.pdf

#### Conferences

Y. Efimov, I. Matveev, "Iris image segmentation by paired gradient method with pupil boundary refinement," in *Book of Abstracts of the 11th International Conference* "*Intelligent Data Processing: Theory and Applications*"., P.113. Barcelona, Spain. 2016, Oct 2016.

Y. Efimov, I. Matveev, "Locating external and internal borders of the iris in eye image by paired gradient method," in *Book of abstracts*. *17th Conference on Mathematical Methods for Pattern Recognition*., P.175. Svetlogorsk, 19-25 September, 2015 Sep 2015.

Y. Efimov, I. Matveev, "Locating external and internal borders of the iris in eye image by paired gradient method," in *58th Science conference of MIPT with international involvement*, Moscow, Russia Nov 2015.

# Academic Awards

Awarded multiple scholarships: State Academic Scholarship for Special Achievements in Studies (2015, 2016, 2017), Tver Region Governor's Scholarship (2011).

**Skills** Deep learning, Computer vision algorithms, biometrics algorithms, Python (Caffe, Theano,

Lasagne, Tensorflow), MATLAB, C, C++, R.

**Languages** Russian (Native), English (Fluent), Deutsch (Basic).