# SERGEI VOLODIN

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Information Technologies and Systems (Saint-Petersburg, Repino, 2016), Speaker

### **EDUCATION**

# École Polytechnique Fédérale de Lausanne Sep 2017 –

MSc in Computer Science Lausanne, Switzerland

Relevant courses: Machine Learning, Software Engineering, Unsupervised and Reinforcement Learning in Neural Networks, Functional Programming, Set Theory

• GPA: **5.56**/6.00

# Moscow Institute of Physics and Technology Sep 2012 – Jun 2017

BSc in Computer Science

Moscow, Russia

• Relevant courses: Machine Learning (intro), Algorithms and Data Structures, Convex Optimization, Random Processes, Functional Analysis

• GPA: 4.84/5.00

### RESEARCH INTERESTS

1. Artificial Intelligence; Machine Learning

2. Mathematical Optimization

3. Robotics

## RESEARCH EXPERIENCE

EPFL, CHILI lab Sep 2017 – present Research Assistant Lausanne, Switzerland

• Designed learning activities involving augmented reality and robots

Skoltech, Energy Systems Sep 2016 – Jul 2017 Research Intern Moscow, Russia

• Examined in MATLAB the structure of the set of boundary nonconvexities of an image of a quadratic map

# MIPT, Theoretical Mechanics dpt.

Oct 2012 - Feb 2013

Technician Moscow, Russia

 Designed and implemented numerical simulations for Euler's rotation equations

• Checked soundness of the approximation using symbolic computations in Wolfram Mathematica

### **PUBLICATIONS**

Petrov A., Volodin S. 🗗 Janibekov's effect and the laws of mechanics. Doklady Akademii Nauk, 2013.

# SKILLS

CONFERENCES

Scientific programming: Keras, TensorFlow, Theano, scikit-learn, MATLAB, Mathematica, R

Languages: English (TOEFL iBT 112/120), French (beginner), Russian (native)

**Programming:** C/C++, Python, AVR C++, Scala, Java, nasm

Frameworks: Qt/QML, Django, Android Studio

Environment: Git, Bash, Debian Linux

### **SCHOLARSHIPS**

☑ Research Scholars at EPFL CHILI Lab (2017)

Abramov Fund's, for excellent grades (2014)

### OLYMPIADS AND HACKATHONS

☑ DeepHack.RL hackathon (Deep RL for Atari games), MIPT, Moscow, Russia, 2017. ☑ 4th place.

## **PROJECTS**

# ☑ TechnoWorks

2012 - 2015

Quadcopter stabilization project

- Developed 

  an algorithm in C++ for stabilization of a quadcopter drone
- Conducted the analysis of launches to improve flying quality
- Results were 🗷 published in the Habrahabr CS blog
- Managed the Community page at a social network

# WORK EXPERIENCE

 $\begin{array}{c} \text{Jul } 2015 - \text{Feb } 2016 \\ \textit{Moscow}, \; \textit{Russia} \end{array}$ 

- $\bullet$  Created  ${\hbox{$\sc C$}}$  system architecture for the real-world escape room games
- Managed a team of two web developers
- More than fifteen solutions sold, currently running in different countries

# VOLUNTEERING

☑ Anti-corruption foundation *Moscow*, *Russia* 

2015 - 2017

• Door-to-door campaign

- Street volunteer
- Rally participant