# an **Beltiukov**

#### MACHINE LEARNING RESEARCHER

Saint-Petersburg, Russia December 8, 1995

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## Skills

Machine Learning Reinforcement Learning, Classic ML, Deep Learning, Computer Vision (+ OpenCV), TensorFlow, PyTorch

**Programming** Python, C#, C++/CUDA, SQL, LaTeX

System administration Windows Server, Linux (Debian-based), AD, Virtualization (Hyper-V, SCVMM, Xen), Network (Routing, Switching,

Cisco), Data Storage systems (SAN)

Languages English, Russian

Other Git, Docker, Bash, Databases

## **Experience**

Research intern St. Petersburg, Russia

Oct. 2019 - now JETBRAINS RESEARCH

• Reproduced several articles in order to understand different possible approaches.

• Prepared a report and gave a talk about the current situation in this area.

#### Python (programming language) tutor

HIGHER SCHOOL OF ENGINEERING

- Designed several Python courses for different kind of listeners.
- · Semi-automated hometask checking with unittests and GitHub.
- Wrote task book for Python learners with tasks ordered by complexity.
- Recorded video lectures and prepared courses for online education.

**Adjunct Instructor** St. Petersburg, Russia

PETER THE GREAT ST. PETERSBURG POLYTECHNIC UNIVERSITY

- Adjunct Python and Data Science instructor for undergraduate students.
- Usually, talk about effective Python usage and Data Analytics methods.
- Developed different tasks for students with automated check process.

#### System administrator

HIGHER SCHOOL OF ENGINEERING

- Implemented failover solution for the data storage network.
- · Expanded and augment existing virtual machines infrastructure.
- Automated multiple manual tasks with Powershell or Python solutions.
- Deployed advanced network and infrastructure monitoring services (like IDS, IPAM, centralized logging, etc.).
- Expanded domain and infrastructure to several branch offices.
- Migrated multiple services to docker.
- Created solution for HTML5-based access to virtual machines on Hyper-V/SCVMM hosts.

## **Education**

#### SPbU (Saint-Petersburg University)

• Thesis: Optimizing Q-learning with K-FAC algorithm

Ph.D. IN COMPUTER SCIENCE

St. Petersburg, Russia Sep. 2019 - now

St. Petersburg, Russia

Sep. 2018 - now

Sep 2017 - now

St. Petersburg, Russia

Jul. 2015 - Jun. 2019

Thesis: developing methods based on world model creation for implementing agent's memory in reinforcement learning.

### SPbPU (Peter the Great Saint-Petersburg Polytechnical University)

M.S. IN COMPUTER SCIENCE

#### SPbPU (Peter the Great Saint-Petersburg Polytechnical University)

B.S. IN COMPUTER SCIENCE

St. Petersburg, Russia Sep. 2013 - Aug. 2017

• Thrice student of the year

• Thesis: application of generative adversarial networks to music generation

**DECEMBER 25, 2019** 

ROMAN BELTIUKOV · CURRICULUM VITAE

Sep. 2017 - Aug. 2019

St. Petersburg, Russia

## **Additional education & Courses**

Machine learningCoursera (by Andrew Ng), score: 97.3%Probability theoryStepik (by Computer Science Center)StatisticsStepik (by Computer Science Center)AstrophysicsCoursera (by SPbPU), score: 88.9%

## Honors & Awards

#### INTERNATIONAL

2018	<b>Winner (individual)</b> , Student's competetion "World-IT-Planet", Cloud Computing track by Huawei	Tyumen, Russia
2018	Runner-up (2nd place) in challenge (in-team), HackJunction, "Mobility" by QOCO	Helsinki, Finland
2017	Winner (individual), Student's competetion "World-IT-Planet", Cloud Computing track by Huawei	Sochi, Russia
2017	Challenge winner (in-team), HackJunction, "Robots, learning machines" by Eficode and Bitville	Helsinki, Finland

#### **DOMESTIC**

2018	Special award (in-team) by Institute of Bioinformatics, BioHack 2018 by EPAM Systems	SPb, Russia
2017	Winner (in-team), Hackathon "Make your university 20.35"	SPb, Russia

## **Certifications**

#### **OPENEDG**

2019 Certified Associate in Python Programming, Verification Code: 6iTz.Eo4D.sR6J

#### **MICROSOFT**

2018 Microsoft Certif	fied Solutions Expert: (	Cloud Platform and Infrastructure,	Certification number:	G878-5366
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2018 Microsoft Certified Solutions Associate: Windows Server 2016, Certification number: G878-5139

2017 Microsoft Certified Professional, Certification number: G511-2245

#### Cisco

2018 Cisco CCNA Instructor, Network Academy Instructor

2017 Cisco Certified Network Associate Routing and Switching, Certificate verification number: 432903347147JRBH

#### HUAWEI

2017 **Huawei Certified Network Associate Storage**, Certificate number: 010100901680806862091409

## **Publications**

Optimizing Q-learning with K-FAC Algorithm

Roman Beltiukov

Analysis of Images, Social networks and Texts, 2019

# **Open-source contributions**

## digestbot @ ODS.AI

- Project: slack bot for finding hot topics and important messages.
- Primary maintainer and architect of the project.
- Contribution: architecture, crawler code, UI code, internal logic, deploy, and support.

## Tortilla @ maybe-hello-world

- Project: HTML5 web interface for Hyper-V virtual machine with role-based access (based on Apache Guacamole).
- Primary maintainer and architect of the project.
- Contribution: architecture, UI, backend (except Java wrapper for Guacamole), deploy.

PowerShell @ Microsoft | Proposed and added additional arguments to commands for working with PFX certificates.

**Posh-ACME** @ rmbolger | Fixed incorrect error ignoring, which prevented automation of several tasks.

xcp-lab-cli @ SPbSTU | Bugfixes, implemented cleanup of old labs, teacher VM creation, and other functions.