

Roman 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

JETBRAINS RESEARCH

- Reproduced several articles to understand different possible approaches.
- Prepared a report and gave a talk about the current situation in this area.

St. Petersburg, Russia

Oct. 2019 - now

Python (programming language) tutor

HIGHER SCHOOL OF ENGINEERING

- Designed several Python courses for different kinds of listeners.
- Semi-automated home task checking with unit tests and GitHub.
- Wrote a task book for Python learners with tasks ordered by complexity.
- Recorded video lectures and prepared courses for online education.

St. Petersburg, Russia

Sep. 2018 - now

Adjunct Instructor

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.

St. Petersburg, Russia

Sep 2017 - now

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.

St. Petersburg, Russia

Jul. 2015 - Jun. 2019

Education

SPbU (Saint-Petersburg University)

PH.D. IN COMPUTER SCIENCE

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

St. Petersburg, Russia

Sep. 2019 - now

SPbPU (Peter the Great Saint-Petersburg Polytechnical University)

M.S. IN COMPUTER SCIENCE

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

St. Petersburg, Russia

Sep. 2017 - Aug. 2019

SPbPU (Peter the Great Saint-Petersburg Polytechnical University)

B.S. IN COMPUTER SCIENCE

- Thrice student of the year
- Thesis: application of generative adversarial networks to music generation

St. Petersburg, Russia

Sep. 2013 - Aug. 2017

Additional education & Courses

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| Machine learning | Coursera (by Andrew Ng), score: 97.3% |
| Probability theory | Stepik (by Computer Science Center) |
| Statistics | Stepik (by Computer Science Center) |
| Astrophysics | Coursera (by SPbPU), score: 88.9% |

Honors & Awards

INTERNATIONAL

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

DOMESTIC

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

Certifications

OPENEDG

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

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| 2018 | Microsoft Certified Solutions Expert: Cloud Platform and Infrastructure , Certification number: G878-5366 |
| 2018 | Microsoft Certified Solutions Associate: Windows Server 2016 , Certification number: G878-5139 |
| 2017 | Microsoft Certified Professional , Certification number: G511-2245 |

CISCO

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| 2018 | Cisco CCNA Instructor , Network Academy Instructor |
| 2017 | Cisco Certified Network Associate Routing and Switching , Certificate verification number: 432903347147JRBH |

HUAWEI

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| 2017 | Huawei Certified Network Associate Storage , Certificate number: 010100901680806862091409 |
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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.