Pavel A. Plyusnin

August 4, 1997

Russian citizenship; Moscow

+7-925-45-09-128, job@plyus.pw

AI/DL/ML researcher, engineer and lecturer with 4+ years of experience

Current Head of On-device AI research group

My pet projects are available on https://plyus.pw/ru/category/projects-rus/

Related experience:

- Sep. 2021 — present: senior researcher at Huawei
  - **Leading a group** of 3 seniors for Post Training Quantization (PTQ) of neural nets
  - **Designed and developed** a state-of-the-art PTQ pipeline
  - **Conducted regular reviews and trials** of other emerging approaches

- Sep. 2019 — present: assistant lecturer in the Department of Informatics, Moscow Institute of Physics and Technology
  - **Conducted one-year** «Object-oriented programming» **course** for 3-year students three times already
    - Conducted more than 75 full-time 3-hour classes
    - Revised and deepened the standard course program, developed my own materials
    - Designed 15 laboratory works
    - At the end of the year, the students conducted several studies **under my supervision**
  - **Developed and recorded** a six-lecture **video course** on machine learning (the last video has over 7000 views)

- Sep. 2019 — Sep. 2021: middle developer in the Deep Learning Group department of ABBYY
  - **Developed an approach** and **implemented** a prototype for the country detection of a company on the document
  - **Introduced** a country detector and language detector **into the product**

- July 2018 – Sep. 2018 - data scientist-trainee in the department of development and IT-validation of Sberbank
  - **Developed a methodology** for assessing data quality
  - Conducted data quality analysis
  - Conducted primary and repeated IT-validation of models

- 2015-2016 – successfully participated in ILab project (Intel & Moscow Institute of Physics and Technology)
  - Made a stack processor model
  - **Wrote a compiler** for my own programming language and optimized it for running on the modeled processor

Conference speeches:

- **DataStart 2022 (RU):** An overview of the current Contrastive Learning methods
- **Summer Merge 2022 (RU):** How Machine Learning Principles Shape Our Minds
- **SMILES 2020 (EN):** Iterative methods for the topic balancing problem

Education:

2019 – 2021: Moscow Institute of Physics and Technology, Methods and Technologies of Artificial Intelligence program – **master's degree with honors**

2015 – 2019: Moscow Institute of Physics and Technology, Department of Control and Applied Mathematics: mathematical modeling of complex processes (CC RAS) – **batchelor's degree with honors**

Additional education:

- Team Management course at Practicum.Yandex
- Passed some additional advanced courses K.V. Vorontsov, D.A. Kropotov, O.Yu. Bakhteev on Machine learning, Deep training, Methods of text analysis, Applied statistical analysis, etc.
- «Practical Deep Learning for Coders» course by the University of San Francisco
- «Management of Innovative Projects» course on Coursera

Professional skills:

- **Languages & frameworks:** Python, PyTorch, Tensorflow, Albumentations, Ray, Pandas, NumPy, SciPy, Matplotlib, Tensorboard, Scikit-learn, XGBoost, BigARTM, nltk, gym, fast.ai, Git, C/C++, SQL
- **Tools:** Visual Studio, CLion, PyCharm, IntelliJ IDEA, Jupyter Notebook, LaTex, Microsoft Office (Excel, Word, PowerPoint, etc.), LibreOffice; OS Windows, Ubuntu, ROS
- **Technologies**: Neural Nets, Image2Image, Classification, Object Detection, Semantic/Instance Segmentation, Recognition, Image Generation, Contrastive Learning, Transfer Learning, Few(Zero)-Shot Learning, Domain Adaptation, Text2Image, GAN, Super-Resolution, Denoising, Deblurring, Style Transfer, Image Captioning, Distillation, Quantization, Pruning
- English: Upper Intermediate (B2)