Mikhail Kotyushev

Education

University

Sep 2018 - Computer Science, Master, Moscow Institute of Physics and Technology, Moscow,

June 2021 https://mipt.ru/.

Department of Innovation and High Technology, Chair of Data Analysis

Sep 2014 - Physical Informatics, Bachelor, Novosibirsk State University, Novosibirsk, Russia,

Jul 2018 https://www.nsu.ru/.

Physical Department, Chair of Automation of Physical and Technical Research

Additional Education

Sep 2018 - Data science student, Yandex School of Data Analysis, Moscow, Russia,

Today https://yandexdataschool.ru/.

Experience

Job

Jun 2019 - Engineer, Huawei Moscow Research Center,

Today Huawei Technologies, Moscow, Russia,

https://huawei.ru/.

Developed unit / automated tests for Java VM bytecode verifier (90%+ code coverage). Implemented network controlling algorithm into device firmware in C. Developing algorithms for upcoming Wi-Fi 7 (X% network latency decrease) in C++ network simulator.

Jan 2019 - Embedded systems engineer, Xumanless, Moscow, Russia.

Feb 2020 Developed hardware & firmware part for self-service secure coatroom solution.

Jan 2015 - Part-time laboratory assistant,

Oct 2018 Laboratory of Nonlinear Optics of Guided Wave Systems, Novosibirsk State University, Novosibirsk, Russia,

Laboratory of Fiber Optics, Institute of Automation and Electrometry of SB RAS, Novosibirsk, Russia,

https://www.iae.nsk.su/ & https://research.nsu.ru/.

Developed software & firmware part for optical fiber testing stand. Automation of experiments in fiber optics field, research in fiber Bragg grating sensors applications (resulting in articles & diploma thesis).

Technical

Languages & C++, Python,

libraries SciPy stack (numpy, pandas etc.), scikit-learn, OpenCV, PyTorch, Huggingface Transformers, Qt5 & PyQt5

Skills Mathematics & algorithms, Linux, git, LaTeX, regular expressions

Other Experience with large C++ projects, firmware programming, electrical circuit prototyping

Research Experience

Thesis topics

2021 Master: Wi-Fi multi-link device transmission parameters control using RL model,

https://github.com/mkotyushev/CV/blob/master/texts/master_thesis.pdf.

2018 Bachelor: Acquisition system for bending sensor based on multicore optical fiber,

https://github.com/mkotyushev/CV/blob/master/texts/bachelor_thesis.pdf.

Competitions publications

2020 VkCup 2021.

NLP answer selection competition (12 / 22)

2020 **OK ML Cup**,

https://cups.mail.ru/ru/contests/okmlcup2020.

NLP toxic content classification competition (7 / 50)

2021 MIPT-NSU-UTMN at SemEval-2021 Task 5: Ensembling Learning with Pretrained Language Models for Toxic Spans Detection,

SemEval-2021 pre-print,

https://arxiv.org/pdf/2104.04739.pdf.