

SKILLS

- **Languages:** C++, C, Python, C#
- **Deep Learning frameworks:** PyTorch, TensorFlow, Keras
- **Libraries/Technologies:** NumPy/SciPy, Sklearn, Pandas, OpenCV, Unity, C++ Boost, MapReduce
- **Tools:** Git, Docker, GDB, Valgrind, LATEX, CMake, Deployment Pipelines (CI/CD), UNIX/Linux, Windows Server

EXPERIENCE

- Software Engineer at [Samsung Research](#) *Feb 2023 – present • 2yr 5 mo*
Visual Display group
 - [Glasses-free 3D monitor](#) Python, OpenCV, Unity, C++, CMake
 - Developed a **mathematical model** related to human perception of stereoscopy
 - **Experimental verification** of the model using methods from **computer vision** and **computational photography**
 - **Progress in the research** led to **start of a new project**
 - Developed a proof of concept application in Unity using the model
 - **Leading development** in a team of two people, planning tasks
 - [Sign Language Avatar](#): an animated helper for deaf people C++, GDB, Valgrind, Tizen
 - **Leading development** of the project, **communicating** needs and priorities with management
 - Working on **simplification** of the project architecture
- Software Development Engineer at [Amazon](#) *Aug 2021 – Aug 2022 • 1yr*
Alexa TextToSpeech C++, C, Python, Deployment Pipelines (CI/CD)
 - Working on **Language Models** for Speech Synthesis
 - **Reduced latency** of a homograph disambiguation model by **56%**
- Research Science Intern at [Yandex](#) Python, PyTorch, NumPy, LATEX *Sep 2020 – Jun 2021 • 9mo*
 - Finding **theoretical foundations** for methods of uncertainty estimation in **Deep Learning**
 - Results are described in the **Master's thesis**
- Machine Learning Engineer Intern at [Yandex](#) *Jun 2019 – Sep 2019 • 3mo*
Machine Translation department Python, TensorFlow, MapReduce, SciPy
 - **Increased quality and diversity** by internal company's metrics and by commonly used machine translation metrics: **10% of max-BLEU growth** and about **60% of self-BLEU diversity growth**
- Software Engineer Intern at [Yandex](#) *Jun 2018 – Oct 2018 • 3mo*
Voice Technology department C++, Python, MapReduce, Protobuf
 - Implemented an optimal algorithm for training n-gram language models in C++ using MapReduce which **reduced training time by 3 times** and slightly increased quality

PROJECTS

- [BigARTM](#) C++, Boost, Protobuf, Travis CI, AppVeyor *Jan 2017 – Jun 2018*
Open Source library for topic modeling
Developed a tool for parallel calculation of pairwise word statistics ([code sample](#), [documentation](#))

EDUCATION

- Master of Science in Applied Mathematics and Computer Science at [Higher School of Economics : Faculty of Computer Science](#) *Sep 2019 – Jun 2021*
Diploma with Honors, GPA 3.90 / 4.0