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Michał Jaworski

Warsaw, Poland

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 3 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**
    - 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