Vlad Grigorev

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OBJECTIVE

Machine Learning Engineer (NLP, Text-to-Speech)

I am a young professional deeply immersed in the area of NLP and Text-to-Speech. Having a background in Academia I am looking for the MLE position to contribute to real-world applications and bring a new set of capabilities to the team. My tech stack contains but is not limited to Python, PostgreSQL, Pytorch, Docker, Git, Shell scripts.

EXPERIENCE

Tensor.ru, MLE (Text-to-Speech service)

01/2022-now

- Developed a python text processor for a Russian Text-to-Speech service. The processor covers the pronunciation of the 80th percentile of Russian names and surnames, which makes robocalls personal and keeps recipients engaged. Text-to-speech service is now adopted by wider CRM and Tech Support teams with ~5k of end clients.
- Implemented NVIDIA's Fastspeech2 English Text-to-Speech model into production. That unlocked another language for the Text-to-Speech service and led to a generic MLOps pipeline to cut implementation time and enhance ML models to the widely adopted way of working.

Technologies: Python, Docker, PostgreSQL, Pytorch, Bash scripts, Git, Pandas, Matplotlib, nltk, Kubernetes.

Joint Institute for High Temperatures, Computational Physics Research Engineer

06/2019-12/2021

Developed a numerical algorithm for shock wave computation and adopted a semiclassical toolkit to take into account quantum effects. That significantly improved accuracy yet the processing time is comparable to the classic model. The new algorithm accelerates the computation of the state of matter under a given set of physical conditions up to 10-80 times, providing a fast and convenient starting point to research electrical and magnetic properties.

Technologies: Python, Pandas, Numpy, Scipy, Matplotlib, C/C++, Git, Linux.

EDUCATION

HSE, Applied Mathematics

2020-2021

Improved mathematical background, left Academia to make an impact on real-world applications.

MIPT, BS in Applied Mathematics and Physics, GPA 4.7 out of 5

2016-2020

Thesis: Self-consistent Quasiclassical Model of an Electronic Subsystem with Discrete Electron Spectrum. Specialized in Computational Methods of Physics. Provided computational experiments by applying the semiclassical atom model to the shock waves in a porous copper and statistically evaluated the model. Proceeded to give a poster presentation at a conference.

<u>Technologies:</u> Python, Pandas, Numpy, Scipy, Matplotlib, C/C++, Git, Linux.

ADDITIONAL EDUCATION AND COURSES

Deep Learning School 09/2022-now

Learning outcomes: introduction to classical ML (sklearn) and neural networks.

Huawei NLP Course 08/2022-now

Learning outcomes: standard pipelines for text processing; nltk, pymorphy. Used them to improve Text-To-Speech service. **Python in Statistical Methods of Science:** 09/2017-01/2018

Learning outcomes: data manipulation and analysis with Python (Pandas, Numpy/Scipy)

PUBLIC SPEAKER

Webinar: "On Text-to-Speech technologies in 2022" – talk presentation for the colleagues

Conference: Equation of States 2020: — poster presentation "Semiclassical calculation of porous copper shock Hugoniots"

Teaching: Summer Math Camp Marabou — 2016-2021 conducting math lessons and developing educational plans.

Improved presentation skills and ability to explain complex subjects concisely.

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