Software Engineer

**Elena Araslanova**

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# Technical Skills

**Languages**: C++, Python, SQL, Go

**Developer Tools**: Git, Docker, Linux

**Domain Knowledge**: machine learning, deep learning, computer vision

**Libraries**: C++ - stl, gtest, Qt, ffmpeg; Python - the majority of ML libraries, OpenCV, pytest

# Experience

**Software Engineer (Machine Learning),** C++ + ML + Python 06/19 - 12/20

*Video Analysis Technologies*

* Developed completely new modules for C++ face analysis library, integrated 10+ deep learning pipelines into the library, including Python/C/C# bindings to deliver DL models to customers;
* Patched 3 opensource libraries, added CI with TDD, increased researchers’ work processes x2 times;
* Built 4 cross platform demo applications for customers with parallel data processing;
* Wrote backend for data collection services, collected a database of 500 000 domain-specific images in 6 months; developed pipelines for video preprocessing and generation of synthetic frames to increase quality of data;
* Conduct code review for interns;
* Completed a computer vision research task; built and made 2 production updates

of 2D Face anti-spoofing classifier (increased ROC AUC from 0.92 to 0.97), tried 5 NN approaches.

**Python Developer, 10 h/week,** Python + ML 01/19 - 12/19

*Skoltech university laboratory, Neural Architecture Search project for* Huawei

* Reproduced 6 of the latest articles and compared performance. Prepared summaries for 4 meetings with *Huawei* ;
* The work became a basis of my MSc thesis.

**Data Analyst,** Python + SQL 04/17 - 03/18

*Home Credit and Finance Bank*

* Improved the customer journey: created and tested hypotheses, visualized results

and pitched conclusions for product managers and marketing director: retention was improved by 10%, 1 successful card product was launched;

* Reduced time of report building from hours to minutes.

# Education

**Yandex School of Data Analysis *MSc-level, Computer Science*** *The most selective master program in Russia (*3% *enrollment rate,* 40% *dropout rate) 2018 - ’21* **Higher School of Economics & Skoltech *MSc, Data Science***

*Worked in a university laboratory for 1 year 2018 - ’20*

**Higher School of Economics *BSc, Applied Mathematics***

*QS World University Rankings: top 100 in Mathematics, top 200 in Computer Science 2014 - ’18*