ILIA OZHMEGOV

DATA SCIENTIST · ML ENGINEER

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EXPERIENCE

Spotcap Global — *Berlin*

DATA SCIENTIST — *May 2020 - May 2022*

- Data Scientist in a Credit and Finance company, working in an agile work environment.
- Developed an Ending Day Balance Forecasting model with a Deep Neural Network. Enables forecasting with a 30-day horizon and predicting account parameters such as accounts receivable and payable.
- Developed an ML model for Loan Default Prediction based only on Bank Account Transaction Data which replaced the former model and reduced the number of independent data sources to only one (Open-Banking System of Nordigen), simplifying Risk Assessment on the client's side.
- Developed a Machine Learning Framework in R using packages such as tidyverse and tidymodels, significantly easing and reducing ML deployment.
- Developed a Bank Account Transaction clustering model with NLP and Linear Algebra techniques that became part of the Bank Account Insides (BAI) product.
- Developed a COVID Resilience metric through EDA with Feature Engineering and a Linear Model, which was used as one of the primary metrics in the BAI product during the acute lockdown period.
- Restructured DS infrastructure by migrating from RStudio Connect Platform to AWS, saving about 12k euros per year (about 82% reduction of DS cloud expenditures).
- Developed and fully automated end-to-end CI/CD pipeline with GitHub Actions and AWS services, limiting human interaction to the minimum.
- Promoted from WS Data Scientist to Data Scientist in September 2021.

State Scientific Center for Robotics and Technical Cybernetics at St.Petersburg — *Saint Petersburg*

C/C++ DEVELOPER — *Oct. 2017 - Oct. 2019*

- Re Architected and redeveloped camera units on two hardware parts; remote control and automated vehicle with a C++ Pylon library.
- Developed log aggregation and analysis utilities with Python that significantly reduced the time spent on log analyzing and hardware adjustment.
- Developed a video compression algorithm based on a combination of lossy and lossless video and image compression methods that eliminated key frame loss to provide a stable and recognizable picture.
- Developed a C-based cross-platform video streaming framework with GStreamer Framework that allowed the usage of the developed algorithm for video streaming on low bandwidth channels.
- Promoted from Junior Developer to Middle Developer in June 2018.

EDUCATION

Berliner Hochschule für Technik — *Berlin*

M.S. IN DATA SCIENCE · GPA: 1.4 — *Oct. 2019 - Mar. 2022*

Saint Petersburg State Polytechnic University — *Saint Petersburg*

B.S. IN MECHATRONICS AND ROBOTICS · GPA: 4.9/5.0 — *Sep. 2014 - Jun. 2018*

WRITINGS

Medium - online publishing platform — *Berlin*

POLARS VS PANDAS: WHAT IS MORE CONVENIENT? — *Jun. 2022*

Conference Extreme robotics and conversion tendencies (ER-2018) — *Saint Petersburg*

COMPRESSION OF STREAMING VIDEO FROM A GROUND ROBOT'S CAMERA FOR COMMUNICATION CHANNELS WITH LOW BANDWIDTH (P.432) — *Jun. 2018*

SKILLS

Programming	Python, R, C++, MATLAB, SQL
Back-end	FastAPI, Django, plumber
Python	Polars, Pandas, NumPy, SciKit-Learn, TensorFlow, Keras, PyTorch, Seaborn, Matplotlib, plotnine
ML Techniques	Regression, General Linear Models, Time Series Analysis, Deep Learning, Computer Vision, Optimization, Vector Embedding, Natural Language Processing (NLP), Linear Algebra, Calculus, Algorithms and Data Structures, Clustering, Feature Engineering
Fav. Tools	nvim, tmux, Alacritty
DevOps	git, GitHub Actions, Docker, Docker Compose, Kubernetes, AWS