Ivan Dobrosovestnov

Middle ML engineer

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"I love when my own work brings measurable benefits to the client. I want to develop in a cool team and share mutual experience with colleagues."

Experience

Middle ML engineer (SIT Programming School) *July 2022 - Present (Serbia, Belgrade)*

Leading projects and building out the ML Pipeline from scratch in R&D department (grooming task with clients, ETL process, deploying models to server, deploying a microservice into the core product).

Teacher and Methodist (Moscow Programming School) *2020 - 2022 (Moscow, Russia)*

- Teaching a C++ and Python courses
- Development of tasks for the inner olympiad and C++ course

Education

Higher Education (Bachelor) *2019 - 2023*

- Higher School of Economics University
- Program: "Applied mathematics and Information Science"
- Professional development program Management (760 hours)
- GPA: 7.79 / 10

Secondary General Education *2017 - 2019*

- Higher School of Economics Lyceum
- Program: "Mathematics, Computer Science and Engineering"

Skills

Programming

- Python
- C++/ C

Technologies

- Advanced ML approaches
- ML Optimization methods
- Recommendation models
- Computer Vision
- NLP
- Statistics
- Crowdsourcing
- Data analysis

Frameworks

- Pytorch
- Hadoop, Spark
- SaS
- Deploying: Jango, Git, CI/CD, Docker, Ansible, SQL, DVC, Linux

Projects

Cheating Detection System

developed a system that detects abnormal behavior of students, such as cheating, misunderstanding of the material

- *US Patent "Method and system for classification of student progress in solving a complex problem" №18/175,551 (Filed Feb 28, 2023, on patent pendind)*
- *US Patent "Method and system for automatically assigning a behavioral category to a student's study" №18/175,551 (Filed Feb 28, 2023, on patent pendind)*

Students Churn Prediction

developed an infrustructure for churn prediction analysis:

- building ML pipeline from scratch (EDA / ETL process / prediction model / deployment)
- NLP analysis of CRM tasks
- achieving 80% PR AUC score when predicting student's churn

Students Knowledge Tracing

developed Transformer Encoder-Decoder model for Knowledge Tracing

- Paper "Profiling of Students' Competencies for Adaptive Learning Systems" *(bachelor's thesis)*

Ivy Unify Contributor

developed bessel_i1 function on tensorflow frontend

Predicting clicks on contextual advertising

- leveraged Spark on HDFS for efficient processing and analysis of large-scale data.
- managed a vast dataset of 2 billion rows, merging tables and selecting relevant product categories for analysis
- conducted thorough Spark-based EDA to uncover user behavior patterns and product preferences
- engineered new features incorporating site category, external metrics, and user metadata to enhance predictive capabilities.
- trained Vowpal Wabbit on the processed data to establish a baseline model for further analysis.

Segmentation of retail products in order to identify the dependence of demand on price

- explored a methodology for segmenting product/store pairs based on machine learning algorithms in SaS
- compared models of price elasticity demand in SaS

Crowdsourcing projects (School of Data Analysis)

- data partitioning and model building for license plate recognition
- data partitioning and classification for recognition of paraphrases in Yandex search engine