Uladzislau S.
Senior ML Engineer

SUMMARY

* Machine Learning Engineer with over six years of experience in AI and machine learning. * Specializes in recommendation systems, predictive analytics, and computer vision solutions. * Experience with predictive models for demand forecasting and property valuation, optimizing inventory and decision-making processes.

TECHNICAL SKILLS

Main Technical Skills	Python, ML, LLM
Programming Languages	Java, Python
Java Frameworks	Apache Spark
Scala Frameworks	Apache Spark
AI & Machine Learning	AutoGPT, AWS SageMaker (Amazon SageMaker), GPT, JAX, LangChain, LLM, OpenAI, OpenCV, PyTorch, RAG, Scikit-learn, T5, TensorFlow, Vertex AI, YOLO
.NET Platform	Azure
Python Libraries and Tools	Dash, JAX, Matplotlib, NLTK, Plotly, PyTorch, Scikit-learn, Seaborn, TensorFlow
Data Analysis and Visualization Technologies	Air ow, Apache Hive, Apache Spark, DVC, Microsoft Azure Synapse Analytics, ML, Power BI, Tableau
Databases & Management Systems / ORM	Apache Hive, Apache Spark, AWS Redshift, Clickhouse, ELK stack (Elasticsearch, Logstash, Kibana), HDFS
Cloud Platforms, Services & Computing	AWS, Azure, GCP
Amazon Web Services	AWS Lambda, AWS Redshift, AWS SageMaker (Amazon SageMaker)
Google Cloud Platform	Dataproc, Google BigQuery
Azure Cloud Services	Microsoft Azure Synapse Analytics
Deployment, CI/CD & Administration	DevOps
Virtualization, Containers and Orchestration	Docker Compose, Kubernetes
Version Control	Github Actions

Logging and Monitoring	Grafana
Other Technical Skills	CycleGAN, DALL·E 2, f, Few-Shot learning, fl, Flink, Hugging Face Transformers, Kube ow, LLM Agents, Looker, ML ow, ML Studio, Prompt Tuning, Snow ake, Stable Di fusion, Summarization, TFX

EXPERIENCE

Senior ML Engineer, CODEPOLE

January 2022 – October 2024

AI-Powered Personalized Fitness Regimens: Designed a recommendation system using NCF and DMF ensemble followed by BERT2Rec integrated with wearable data to deliver tailored workout routines and real-time adjustments, boosting gym member retention and engagement. Improved workout adherence by 35%, increased retention by 22%, and achieved 87% recommendation accuracy.

Recruitment Assistant: Implemented recruitment assistant using Sentence Transformers for CV analysis, GPT-4 API for screening and feedback, and a Pinecone for knowledge base RAG. Orchestrated workflows with LangChain and deployed on Azure Cloud, reducing hiring time by 20% and improving candidate-job match accuracy by 11%.

Customer Purchase Pattern Prediction: Developed a hybrid time-series clustering model (Prophet, LSTM, DBSCAN) on GCP to analyze purchase behavior and forecast demand, optimizing stock and sales for a retailer. Improved stock turnover by 20% and forecasting accuracy by 25%, with 85% demand prediction accuracy.

Senior ML Engineer, NORD-SOFT SOLUTIONS

October 2020 – January 2022

Voice-Activated Reservation System: Implemented a voice recognition system using Google Dialogflow and Google Speech-to-Text, integrated with the restaurant's reservation calendar to streamline the booking process. Reduced manual reservation handling time by 74%, boosted the number of reservations by 33%, decreased call volume to the hotline by 18%.

Automated Damage Assessment for Car Insurance Claims: Developed a damage detection model by fine tuning YOLO on synthetic dataset on AWS SageMaker to identify and assess vehicle damage from uploaded images, accelerating insurance claims processing. Reduced claim processing time by 45%, improved damage assessment accuracy by 14%, and achieved .97 precision in damage classification, increased the number of claims processed per day by 28%.

ML Engineer, IBA Group

April 2018 – October 2020

License Plate Recognition for Residential Security Gates: Developed a license plate recognition system using MobileNet followed by Tesseract OCR pipeline, integrated with gate control systems to enhance security and streamline vehicle entry in gated communities. Reduced entry time by over twice and achieved 97% average chars accuracy in license plate recognition.

Real Estate Price Prediction for Property Valuation: Built an XGBoost model, leveraging historical property data to predict property values based on location, square footage, and

amenities. Increased price prediction MSLE by 28% and improved decision-making for buyers and agents. Used SHAP to understand the impact of different features on price predictions.

Customer Segmentation for Behavioral Analysis in Retail: Applied K-Means Clustering and DBSCAN on Scikit-Learn to segment customers using POS data on transaction history and product preferences. Enhanced targeted marketing efficiency by 20%, increased customer retention by 15%, and achieved 88% ROC AUC in segmentation, enabling targeted marketing efforts and loyalty programs.

EDUCATION

BELARUSIAN STATE UNIVERSITY (BSU), Master's degree

2020-2022

- Completed a thesis on "Self-Adaptive Algorithms for Real-Time Anomaly Detection in Dynamic Data Streams"
- Focused on advanced Natural Language Processing and Statistical Modeling techniques.
- Published a research paper on integrating Bayesian models with transformer architectures for domain-specific text generation.

BELARUSIAN STATE UNIVERSITY (BSU), Bachelor's Degree

2016-2020

- Completed a thesis on "Probabilistic Topic Modeling with Variational Inference for Large-Scale Document Clustering."
- Achieved top performance in Computational Mathematics, specializing in numerical methods and linear optimization.
- Led a team to build a recommendation system, utilizing statistical and ML models, which earned recognition in a national competition.