Anton BELYY

anton.belyy@gmail.com · avbelyy.github.io

LinkedIn · GitHub · Scholar

EDUCATION

Aug '19 — May '22	**M.Sc.Eng.** in **Computer Science (NLP)**, Johns Hopkins University, USA GPA: 4.0. Advisors: Benjamin Van Durme (Primary), Vladimir Braverman (Secondary) Research projects: knowledge graph completion, controlled text generation, schema induction Research internship on **Conversational AI** at **Microsoft Research** in Summer '21: [paper]
Sep '13 — May '18	**B.Sc.** in **Informatics and Applied Mathematics**, ITMO University, Russia GPA: 3.6. Advisors: Andrey Filchenkov (Primary), Konstantin Vorontsov (Secondary) Research projects: plagiarism detection, hierarchical topic modeling Thesis: Construction and Quality Evaluation of Heterogeneous Hierarchical Topic Models • **Distinguished thesis award** (given to 2 out of approx. 50 undergraduates)

EMPLOYMENT

Jun '25 – Present	**Senior AI Software Engineer** in **AI Assistant**, Bloomberg, USA • **MCP Tools**: I build and maintain MCP tools powering Bloomberg AI Assistant, ensuring high availability and factuality of AI agents used by 100s of thousands of Terminal users. • **MCP Resources**: I lead the adoption of MCP Resources as an agent-tool communication layer to enable higher factuality & lower latency / LLM token usage across all Bloomberg AI agents.
Jun '24 – May '25	**Senior Machine Learning Engineer** in **Credit Risk Detection**, Stripe, USA • **Proactive LLM agents**: I built LLM agents to investigate merchants' online presence to detect early signs of bankruptcies, projected to save several million USD in credit losses yearly. • **XGBoost → Transformer**: I led an experimental project migrating Stripe's credit scoring models from XGBoost to Transformer-based DNN, leading a team of five ML engineers.
Jun '22 – May '24	**Machine Learning Engineer** in **Knowledge Graphs** and **LLM Datasets**, Apple, USA • **KG**: I am a founding engineer of the ODKE project, which transforms unstructured Web data into millions of facts every week to continuously improve coverage and freshness of Apple KG. I implemented scalable fact extractors using in-house and OpenAI LLMs, built fact verification model using Spark MLLib, built CI/CD pipelines and oversaw integrating ODKE with Apple KG. • **LLM Datasets**: I used MapReduce, Spark and ML to turn petabytes of multimodal Web data into billion-scale, high-quality datasets used to train LLMs for Siri and Apple Intelligence.
Sep '17 — Aug '19	**Machine Learning Engineer** in **Risks** and **ML Automation**, Tochka Bank, Russia • **Risk scoring**: using Hadoop and Spark, I enriched internal data for 200K+ bank clients and 50M+ transactions with Web-scraped public data to improve risk scoring accuracy by 10%. • **ML automation**: built ML models to detect intent for the top-90% client questions in chat. Built systems to automate scheduling call center shifts while improving accuracy by 10%.
Oct '15 — Sep '16	**Software Engineer** in **Ads**, VK.com, Russia • **URL fraud**: built service to periodically detect malicious URL redirect changes in VK ads. • **Click fraud**: built ML models to detect users that generate fraudulent clicks in VK ad network. Model was deployed semi-automatically and helped recover up to 3% monthly ad revenue. • **Ads search**: launched moderator search interface (incl. full-text search) over 30M+ VK ads. • **Ads scoring**: implemented advertiser ranking for faster moderation of top-10% clients.

LANGUAGES AND TECHNOLOGIES

Languages	Python (advanced); Golang, Scala, JavaScript, SQL, C++, bash (proficient)
Technologies	Airflow, Spark, Iceberg (advanced); XGBoost, PyTorch, AWS, Docker, K8s (proficient)