

Anton BELY

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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 '24 — PRESENT | **Senior Machine Learning Engineer in Credit Risk Detection**, Stripe, USA
• **Credit scoring**: using XGBoost, PyTorch and Spark, I build ML systems for estimating credit risk exposure and predicting merchant defaults to prevent tens of \$M in credit losses yearly.
• **Model explainability**: I implemented and deployed scalable post-hoc explanation pipelines for several ML models at Stripe, leading to higher model trust during review-based actioning.
- 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.

TEACHING EXPERIENCE

- JAN '21 — MAY '21 | **Introduction to Algorithms 601.433/633 (Head TA)**, JHU (100+ students)
• Managed 9 CAs and 1 TA, created homework and exam problems, held weekly office hours
- SEP '17 — AUG '19 | **Natural Language Processing (TA)**, Coursera (40,000+ students by Sep '19)
• Answered 200+ students' questions, helped create homework and project assignments

LANGUAGES AND TECHNOLOGIES

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