Danil Kizeev

Keywords

python, optimization, machine learning, data science, statistics, numpy, pandas, PostgreSQL, ClickHouse, scipy, transformers, pytorch, C++, Rust, NLP, Docker.

Experience

Actual

2022 Sep – 2023 Mar **Game developer @ Hive**, Perm, Russia
Applying genetic and differential evolution algorithms to build an efficient matchmaker for multiplayer in online mobile games; making visualizations via egui and macroquad; building data collection pipelines; rust language. Making player and debug cameras; building raycasting.

2023 Oct – **AI Engineer @ Exponenta**, Moscow, Russia
Working with repricer on marketplaces. Implementing optimal prices models using contextual multi-armed bandits (CMAB). Implementing models of competitors using boostings and neural networks (CLIP, siamese, XGB). Creating framework for data labelling using python-telegram-bot (PTB). Creating models of trend, seasonality, demand using time-series models (Prophet, XGB, xARIMAx, linear) and neural networks (BiLSTM, Transformers). Applying to production with customer. Lifting using Docker+Flask for MVP's

Vocational

2021 Apr – 2021 Jun **Data Science intern**, *Lead by lead DS @ Hyprr*, Saint-Petersburg
Solved case of automatic categorization of users posts in social network. Scraped, labeled the data. Used NLP for CV domain.

Education

University

Sep 2021 – Jun 2024 **Data Analytics, Master**, *Saint-Petersburg National Research University of Information Technologies, Mechanics and Optics, Russia*

Sep 2018 – Jun 2021 **Applied mathematics and computer science, Bachelor**, *Saint-Petersburg State University, Russia*

2017 – 2018 **Cybersecurity department, Bachelor**, *Tver State University, Russia*

MOOCs, CSC, YSDA

Sep 2022 **NLP course @ YSDA**

Sep 2022 **Deep CV & Graphics course @ YSDA**

Feb 2022 – May 2022 **Mathematical statistics @ CSC**

Feb 2021 – Feb 2021 **Introduction in geometric programming**,
https://intuit.ru/verifydiplomas/101428913

Jun 2020 - Jun 2021 **Machine Learning Course**,
https://mlcourse.ai

– Saint Petersburg, Russia
+79040283459 • kizeevdanil@yandex.ru

Sep 2019 - Jan 2020 **Elements of financial mathematics**,
https://intuit.ru/verifydiplomas/101301190

Sep 2018 - Nov 2018 **Basics of programming and vectorization with R**,
https://stepik.org/course/497

Apr 2018 - Jun 2018 **Algorithms: theory and practice. Methods.**,
Learned basics of algorithms and practiced it,
https://stepik.org/course/217

Projects

Study projects/pet projects

Mindmaps for everything
https://github.com/breadfan/mindmaps-for-everything
Smart diagrams for math-related objects
Created mindmaps for better understanding ("Zettelkasten" inspiration) and keeping in mind tech-related objects. There are statistics, NLP, optimization and deep learning using pytorch now. Maps are available in **rus** and **eng** languages.

Lyric music recommender
https://github.com/breadfan/lyrics-based-songs-recommender
Using doc2vec and BERT embeddings for recommendation based on songs lyrics.
Created models with doc2vec and DistilBERT, created UMAP reduced embeddings for 2-d and 3-d visualisations (Plotly). Generated bot using «telegram» library.

Automatic posts categorization
https://github.com/breadfan/Bachelor-Thesis
Applying BERT for automatic posts categorization in social network.
Using BERT, BERTopic and word2vec + TF-IDF for labeled images/video categorization.
Upgraded quality of models from BERT to word2vec.
Having categories need to make mapping from labels amount of posts to that categories for making simple recommendations.

Accelerated MDM-method
https://github.com/breadfan/Accelerated_MDM_method
Researching acceleration of an MDM-method
As a course work for third year two methods were implemented: MDM and accelerated MDM methods with visualization for 2- and 3-dim. Cases for running time comparison.

Technical Skills

Languages Python, Rust, plpgsql, C/C++
VCS Git
OS Windows, Linux (Ubuntu)

On the Internet

GitHub https://github.com/breadfan
StackOverflow https://stackoverflow.com/users/9850300/taciturno
LinkedIn https://www.linkedin.com/in/rocauc
LeetCode https://leetcode.com/breadfan/