

Keywords

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

Experience

Actual

2022 Sep – **Game developer @ Hive**, Perm, Russia.

2023 Mar 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.

Vocational

2021 Apr – **Data Science intern, Lead by lead DS @ Hypr**, Saint-Petersburg.

2021 Jun Solved case of automatic categorization of users posts in social network. Scraped, labeled the data. Used NLP for CV domain.

Education

University

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

Sep 2018 – **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 – **Mathematical statistics @ CSC**.

May 2022

Feb 2021 – **Introduction in geometric programming**,

Feb 2021 <https://intuit.ru/verifydiplomas/101428913>.

Jun 2020 - **Machine Learning Course**,

Jun 2021 <https://mlcourse.ai>.

Sep 2019 - **Elements of financial mathematics**,

Jan 2020 <https://intuit.ru/verifydiplomas/101301190>.

Sep 2018 - **Basics of programming and vectorization with R**,

Nov 2018 <https://stepik.org/course/497>.

Apr 2018 - **Algorithms: theory and practice. Methods.**,

Jun 2018 *Learned basics of algorithms and practiced it*,

<https://stepik.org/course/217>.

Projects

Study projects/pet projects

Mindmaps <https://github.com/breadfan/mindmaps-for-everything>

for **Smart diagrams for math-related objects**

everything 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 <https://github.com/breadfan/lyrics-based-songs-recommender>

recom- **Using doc2vec and BERT embeddings for recommendation based on songs**
mender **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 <https://github.com/breadfan/Bachelor-Thesis>

posts catego- **Applying BERT for automatic posts categorization in social network.**

rization 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 https://github.com/breadfan/Accelerated_MDM_method

MDM- **Researching acceleration of an MDM-method**

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/>