Vlad Matei — Software Engineer

✉ mateiaass@gmail.com
📍 Bucharest, Romania
Github
📞 0771761295
in LinkedIn

Profile

Graduated with an MSc in AI from Politehnica University of Bucharest. Proficient in programming, algorithms, and machine learning. Skilled in NLP, deep learning. Passionate about cutting-edge research.

Professional Experience

Software Engineer
Luxoft
01/2024 – present

- Utilized Java 17, Apache Camel, JUnit 5, Cucumber, Mockito, Jenkins, and Linux to develop functional interfaces between various backend components in the fintech domain at Murex. Worked in an Agile SAFe environment.

Junior Software Engineer
Deutsche Bank
09/2022 – 01/2024

- Actively involved in backend development, continuous integration, deployment, POCs, testing and monitoring, using technologies like Java, Spring/Spring Boot, Maven, GraphQL, JUnit, Mockito, Cucumber, Jenkins, OpenShift, TeamCity and Unix
- Using Apache Hadoop, Spark, Apache Kafka, Shell Scripting, PL/SQL, SQL, Control-M / Cron jobs to ingest big data into the Oracle database

Software Engineer Intern
Deutsche Bank
03/2022 – 07/2022

- Participating in advanced courses encompassing Java, Maven, SQL, Hibernate, Spring Boot, Tomcat, JavaScript, TypeScript, React, Angular, while also refining business communication skills and developing a strong foundation in Google Cloud Fundamentals

Projects

Grammar Error Corrector

- Developed the *most capable Romanian Grammar Error Corrector* as a master's research project.
- Artificially generated a parallel dataset with incorrect and correct sentence pairs extracted from *MARCELL*. Trained a *T5Large* model using optimization techniques and data augmentation methods like *Round-Trip Translation* and *Back-Translation*.
- Achieved a final F0.5 score of 80%, surpassing the current state-of-the-art by 20%.

ECG Heartbeats and Racket Sports Classification

- Employing tools such as Matplotlib, Pandas, Seaborn, and SciPy, a balanced class verification was ensured, while data visualization was executed with precision. The approach encompassed:
- (1) *Manual Attribute Extraction*: Data standardization, feature selection, along with statistical and Fourier techniques.
- (2) *Model Training*: Using techniques like RandomForest, GradientBoosted Trees, SVM and Grid Search coupled with Cross Validation., The expertise has expanded into neural networks, leading to the implementation of: Multi-Layered Perceptron, Convolutional InceptionTime and Recurrent LSTM architectures along with an entire analysis.

Interests

- Playing the Guitar
- Playing Piano
- Volleyball
- Graphic Design
- Hiking

Education

Master of Science / Artificial Intelligence
Politehnica University of Bucharest / Faculty of Automatic Control and Computer Science
10/2023 – 07/2025

- The dissertation includes a series of tools developed specifically for the Romanian language, such as: abstractive summarization, creation of a grammar corrector, and development of datasets for historical NER.

Bachelor of Computer Science
Politehnica University of Bucharest / Faculty of Automatic Control and Computer Science
10/2019 – 07/2023

- GPA : 3.815
- Thesis Grade: 10

Technical Skills

Java, Python, C, C++, SQL, PL/SQL, JavaScript, Bash, Pytorch, Tensorflow, Spring, Angular, React, Pandas, Jenkins, Git, Linux, GCP, OpenShift, TeamCity, Kubernetes, Docker, Matlab, Prolog, LaTeX, Postman, Maven

Interpersoanl Skills

Analytical Thinking, Attention to detail, Building Trust, Collaboration & Teamwork

Publications

Enhancing Romanian Offensive Language Detection through Knowledge Distillation, Multi-Task Learning, and Data Augmentation ⧉
29th International Conference on Applications of Natural Language to Information Systems, NLDB 2024
19/09/2024

RoLargeSum: A Large Dialect-Aware Romanian News Dataset for Summary, Headline, and Keyword Generation ⧉
Accepted at COLING 2025
15/12/2024

HistNERo: Historical Named Entity Recognition for the Romanian Language ⧉
International Conference on Document Analysis and Recognition (ICDAR 2024)
30/04/2024

Certificates

Associate Google Cloud Engineer
Deutsche Bank

Java Course
Google Digital Workshop for Programmers

Building Microservices Arhitecture
NobleProg

Languages

Romanian — Native/Bilingual

English — Fluent