

SKILLS

- Python, Java, C/C++
- Machine Learning (TensorFlow, PyTorch, Scikit-Learn)
- Excellent communication and teamwork skills
- Agile project management & Jira
- Eager to expand knowledge
- Strong analytical and problem-solving skills

EXPERIENCE

01/2023 – 09/2024

Software Engineer, Deutsche Boerse Services, Prague, CZ

- Developed backend applications in Java Spring and Python for the DataShop platform, delivering historical stock data to external clients.
- Collaborated closely with 3+ cross-functional teams using Jira to manage product tasks, define requirements, and track delivery progress, ensuring 95% of sprints delivered on time.
- Contributed to the design and development of a machine learning-based sales recommendation engine to optimize data product offerings.
- Ensured product quality and reliability through robust unit testing (raised unit test coverage from 65% to 85%) and agile practices.

05/2021 – 01/2023

IT Project Coordinator, DHL IT Services, Prague, CZ

- Supported the rollout of the Zscaler security solution to over 100,000 users by coordinating user access, collecting feedback, and resolving usage issues across DHL's global workforce.
- Assisted the project manager in tracking milestones, monitoring progress, and organizing project documentation.
- Provided technical assistance to 200+ employees using Zscaler, addressing access problems, setup questions, and issue escalations.
- Compiled and analyzed weekly performance and adoption reports using MS Excel and internal tools, highlighting key insights for senior stakeholders.

EDUCATION

02/2025 – Present
(06/2026)

Master in Artificial Intelligence and Robotics

Master in Engineering in Computer Science

Sapienza University, Rome, IT

GPA: 29/30 (First class equivalent)

Erasmus Mundus joint Master in Artificial Intelligence (EMAI)

09/2024 – 12/2024

Master in Intelligent and Interactive Systems

Pompeu Fabra University, Barcelona, ES

GPA: 8.2/10 (First class equivalent)

Erasmus Mundus joint Master in Artificial Intelligence (EMAI)

09/2021 – 06/2024

Bachelor of Software Engineering

Czech Technical University, Prague, CZ

Thesis: "Autonomous driving using Amazon DeepRacer car"

Thesis & Final State Exams: Grade A (90/100)

Relevant coursework: Programming and Algorithmics, Statistics, Operating Systems, Database Systems, Cryptography and Security, Java Technology, Conceptual Modelling

PROJECTS

Improving Robustness of Deepfake Detectors through Gradient Regularization

PyTorch, EfficientNet, FGSM/PGD, adversarial training, gradient penalty

- Designed and implemented a deepfake detection system with high accuracy and adversarial robustness using gradient regularization.
- Evaluated model performance under FGSM and PGD attacks.

Cultural Bias Classification in Multilingual Data

Python, DistilBERT, feature engineering, Random Forests

- Designed a two-stage classifier to detect cultural bias using engineered features.
- Achieved strong performance using Random Forests.
- Explored and compared LM-based and non-LM-based methods.

Animated Origami Flower Simulation

WebGL, GLSL, 3D transformations, shaders, procedural animation

- Designed and implemented a real-time animated origami tulip using procedural mesh generation and transformation matrices.
- Built a custom folding animation system using vertex-level transformations.
- Enhanced visual realism with custom shaders, dynamic lighting, and basic shadow simulations.

More projects available in portfolio: <https://lizatskhe.github.io/portfolio/>

LEADERSHIP

- Erasmus Mundus AI (EMAI) Representative on Erasmus+ Asia-Pacific Cluster Meeting – November 2024
- Barcelona Deep Learning Symposium Volunteer – December 2024
- EXPO Astana 2017 Event Coordination Volunteer – June 2017

LANGUAGES

- English – C1
- Russian – native
- Czech – B2
- Spanish – A1
- Italian – A1