

Aleksander Piciga

Mathematics in Data Science MSc. @ TUM

6

+386 41 298 104

aleksander.piciga@gmail.com

www.alpi314.com

in

www.linkedin.com/in/aleksanderpiciga

ABOUT ME

Al and Data Science Engineer with 4+ years of industry and academic experience. I quickly adapt to new environments - worked for large corporations, research institutes, and start-ups. Bringing together the top 5% academic performance with 9+ years of coding experience to come up with and implement exciting new ideas. Already awarded 1st place in hackathon challenges as well as in international competitions. Always looking to go the extra mile.

LANGUAGES

Slovenian (native) English (C2) German (B1)

PROGRAMMING

Python ***

Go ***

SQL ***

C++ **

R *

C# *

Java

DEVOPS

Docker
Command Line Tools
Windows/Linux Servers
GitLab/GitHub
CI/CD Pipelines
Network/Remote Access
Diverse Databases

EDUCATION

OCT 2024

Technical University of Munich – M.Sc

Mathematics in Data Science, Munich - Germany

- Topics: Al, ML, Deep Learning, and related Mathematics
- · Courses:
 - Introduction to Deep Learning
 - · Machine Learning
 - Foundations of Data Engineering
 - Generalized Linear Models
- GPA (best 1.0 5.0): 1.0
- Programming Languages: Python, R, C++, SQL

OCT 2020

University of Ljubljana – B.Sc.

Mathematics and Computer Science, Ljubljana - Slovenia

AUG 2024

- Topics: Analysis, Linear Algebra, Probability and Statistics, Algorithms and Data Structures, Databases, Programming
- Main Interest:
 - Intelligent Systems
 - Computer Vision
 - Machine Learning with Graphs
 - Introduction to Artificial Intelligence
- GPA (best 10.0 5.0): 8.8
- Programming Languages: Python, C++, Java, SQL

PROFESSIONAL DEVELOPMENT

CONFERENCE - Network of Knowledge

- Slovenian National Supercomputing Network (SLING)
- European High-Performance Computing (EuroHPC)
- Learned how to access and use HPC networks to create and manage task execution (Training Large Al Models)

SUMMER SCHOOL - European Summer School on Al

- Advanced Education Courses in AutoML, Continuous Learning for Image Classification, Knowledge Representation and Reasoning in Ontologies
- A broad set of interesting cutting-edge Al Topics with a wide array of industry and academic professionals

CONFERENCE - Slovenian KDD Conference

- Statistical Data Analysis, Link Detection, Link Analysis, Social Network Analysis, and Data Mining
- PRESENTED PAPER: <u>Structure-Based Molecular Fingerprint</u>

 <u>Prediction through Spec2Vec Embedding of GC-EI-MS Spectra</u>

PROJECTS

AI Bird Migration Tracking

Using Computer Vision for Species Recognition on Bird Feeders Bronze Medal, Science, New York - USA

PM Particle Station

Designed and Built Stations for PM detection, health related Gold Medal, Business, New York - USA

Incentivized Data Platform

Blockchain Incentivized Data and Model Platform with Verifiable AI Best Starknet and Avail Project Runner Up Al Integration, Filecoin London, United Kingdom

Digitalization of Housing Offers

A Solana-based platform with consensus-based rewards for publishing offline housing flyers, primarily aimed at helping with student housing. HackaTUM, München Germany

LLM Augmented Hotel Search

Project for CHECK24 the largest German Application Portal. Improved Hotel Search on Diverse Filters and User Wishes 4th Place at TUM.ai Makeathon, München, Germany

SCHOLARSHIPS

Ad Futura (Exceptional Slovenians Abroad) **Deutschland Stipendium Zois University (Exceptional** Students) Zois Highschool (Exceptional **Highschool Students**)

HOBBIES

Chess Skiing Running

PROFESSIONAL EXPERIENCE

FEB 2024

JUL 2024

Siemens - DAAI, Semantics and Reasoning

- Topics: Natural Language Processing, Automated Code Generation, Automated Testina, Simulation Environments, Large Language Models
- Value: Reduces costs through automated PLC code testing in simulation environments. Improves company-wide code quality and prevents PLC errors in production.
- Experience: C# programming, TIA Portal, prompt engineering, and common pitfalls of deploying LLMs in production.

APR 2023

JUN

2024

DataFund - Data Scientist

- Topics: Image Segmentation, Computer Vision, Healthcare, **Annotation Tools**
- Value: Currently, bone marrow cells are counted manually from scans. Our Al-powered method reduces waiting times from months to weeks.
- Experience: Python, Few-Shot Fine-tuning, Database Design, React for Frontend Annotation Tool

JUN 2023 _

FEB 2024

Jožef Stefan Institute – Student Researcher

- Topics: Multi-Label Classification, Traditional ML Methods, Mass Spectrometry
- Value: Exploring approaches of molecular fingerprint prediction on novel embedding technique spec2vec.
- Experience: Conference Paper Presentation, Research Workflow, Reproducability of Results, Python

JUN 2020

AUG 2023

Izstop – Backend Engineer

- Topics: Central Education Registry, Largest Slovenian eAuction Platform, Augmented Reality Control Software
- Value: Re-implemented Central Education Registry -Significantly Optimizing DB Queries, Design, and Code Speed. Designed the Backend Logic, Flow, and Database for eDrazbe.si, the largest Slovenian eAuction Platform. Designed Async Control for Virtual Tourist Experience.
- Experience: GoLang, SQL, Database Design, Backend Design, OOP, Interfaces, Query/DB Optimization, Async Programming

Munich, June 4th 2026 Aleksander Piciga