GERGŐ BOGACSOVICS

PROFESSIONAL SUMMARY

I am an assistant lecturer with experience in data analysis, as well as using advanced data visualization techniques, machine learning, and deep learning-based solutions both for business-related and medical applications. I have worked with massive amounts of data and Big Data-related technologies (PySpark, Azure Databricks, Azure Data Lake) and natural language processing-related problems as well. I have more than 5 years of teaching experience, have held multiple Azure training days for industrial partners, university students, and global partners, and I am also a certified Nvidia Ambassador.

EXPERIENCE

Assistant Lecturer, 2024 – Current
University of Debrecen
I teach subjects related to artificial intelligence, natural language processing, machine learning and reinforcement learning.
Core technologies: Python, Azure, Nvidia, Unity, C#.

Senior Data Engineer, 2023 – Current
Tata Consultancy Services
I work on migrating data from on-premises to cloud (Azure).
Core technologies: Python, MS SQL, Azure, Databricks.

Data Analyst, 2021 – 2023
National Data Asset Agency
I implemented automated ETL and ELT pipelines to ingest, transform, and store data from various sources. I was also in charge of Power BI.
Core technologies: Python, Azure, Databricks, Power BI.

Junior Data Analyst, 2020 – 2021
Neumann Nonprofit Közhasznú Kft.
I worked on loading data from publicly available sources and storing them on a data lake in the cloud.
Core technologies: Python, Azure, Databricks.

EDUCATION

2020 –	University of Debrecen, Doctoral School of Informatics
2018 – 2020	University of Debrecen, Computer Science MSc
2015 – 2018	University of Debrecen, Computer Science BSc

CERTIFICATIONS

- Azure AI-900
- Azure Data Fundamentals
- Accelerating Data Engineering Pipelines (Nvidia)
- Fundamentals of Accelerated Data Science (Nvidia)
- Foundations of Deep Learning (Nvidia)
- Artificial Intelligence (Information Technology Specialist)
- Generative AI with Diffusion Models (Nvidia)

LANGUAGES

Hungarian: First language
English: C1   **German:**   B2

CONTACT

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CORE SKILLS & EXPERTISE

- Apache Spark
- Azure
- Azure Machine Learning
- Big Data
- Databricks
- Data engineering
- Data science
- Data visualization
- Deep learning
- Docker
- ELT
- ETL
- Machine learning
- OOP
- Power BI
- Python
- SQL
- Storytelling
- Tableau

OTHER SKILLS

- C#
- MS SQL
- PostgreSQL
- UML

ADDITIONAL INFORMATION

- Participation in the **Open Clouds for Research Environments** (OCRE) programme (Azure research environment, responsible for managing and allocating the resources)
- **5+ years of teaching experience** (University of Debrecen)
- **5+ years of research background** in the fields of artificial intelligence, machine- and deep learning
- **Artificial Intelligence Doctoral Academy** (AIDA) member and part of the Support Committee

SELECTED PUBLICATIONS

• **Bogacsovics, G.,** Harangi, B., & Hajdu, A. (2023, June). Increasing the diversity of ensemble members for accurate brain tumor classification. In 2023 IEEE 36th International Symposium on Computer-Based Medical Systems (CBMS) (pp. 529-534). IEEE.

• **Bogacsovics, G.,** Toth, J., Hajdu, A., & Harangi, B. (2022). Enhancing CNNs through the use of hand-crafted features in automated fundus image classification. Biomedical Signal Processing and Control, 76, 103685.

• **Bogacsovics, G.,** Hajdu, A., & Harangi, B. (2021, December). Cell Segmentation in Digitized Pap Smear Images Using an Ensemble of Fully Convolutional Networks. In 2021 IEEE Signal Processing in Medicine and Biology Symposium (SPMB) (pp. 1-6). IEEE.

• **Bogacsovics, G.,** Hajdu, A., Lakatos, R., Beregi-Kovács, M., Tiba, A., & Tomán, H. Replacing the SIR epidemic model with a neural network and training it further to increase prediction accuracy. In Annales Mathematicae et Informaticae (53.): Selected papers of the 1st Conference on Information Technology and Data Science (pp. 73-91).

• Harangi, B., Toth, J., **Bogacsovics, G.,** Kupas, D., Kovacs, L., & Hajdu, A. (2019, September). Cell detection on digitized Pap smear images using ensemble of conventional image processing and deep learning techniques. In 2019 11th International Symposium on Image and Signal Processing and Analysis (ISPA) (pp. 38-42). IEEE.

SELECTED CONFERENCE PRESENTATIONS

• IEEE CBMS 2023 – Increasing the diversity of ensemble members for accurate brain tumor classification (*Best Student Paper Award*)

• IEEE SPMB 2021 – Cell Segmentation in Digitized Pap Smear Images Using an Ensemble of Fully Convolutional Networks

• ICAI 2020 – Designing self-driving agents for racing games

• IEEE ISPA 2019 – Cell detection on digitized Pap smear images using ensemble of conventional image processing and deep learning techniques