



## Aleksandar Anžel

📍 Hans-Meerwein-Str. 6,  
D-35032 Marburg, Germany

☎ +49 64 212 821 587


✉ aleksandar.anzel@uni-marburg.de

Born 06.08.1995.

 AAnzel

 AAnzel

 AleksandarAnzel

 <https://aanzel.github.io>

### WORK EXPERIENCE

---

October 2021 – present

#### Data Scientist

eMedicals Healthtech GmbH, Frankfurt am Main

- Using analytical, statistical, and programming skills to collect, analyze, and interpret large medical and biological data sets. Managing algorithm development and using machine learning tools and statistical techniques to produce solutions to problems.

December 2020 – present

#### Research assistant

Heider Lab, Philipps-Universität Marburg, Marburg

- Creating bioinformatics pipelines, using ML for organic storage modeling, using ML for omics problems, using ML for human-centered visualization

### EDUCATION

---

2020 – present

#### Ph.D. degree in Computer Science

Philipps-Universität Marburg

August 2021

#### OxML summer school participant

Machine Learning summer school, University of Oxford

2018 – 2020

#### Master's degree in Mathematics

**Module: Computer Science and Informatics**

Faculty of Mathematics, University of Belgrade

- Average grade: 10.00 (out of 10.00)
- Thesis: *Determining protein N-glycosylation with machine learning methods*

2014 – 2018

#### Bachelor's degree in Mathematics

**Module: Computer Science and Informatics**

Faculty of Mathematics, University of Belgrade

- Average grade: 8.66 (out of 10.00)

### SKILLS

---

#### Languages

Serbian – Native proficiency

English – Full professional proficiency

- Cambridge English: First (FCE): upper intermediate (B2 in CEFR)

German – Elementary proficiency

French – Elementary proficiency

#### Computer Science

Software Development

- C, Python, C++, Java, MATLAB, Shell, Haskell, Assembly IA-64, Assembly ARM-32

Machine Learning

- Keras, Tensorflow, Scikit-learn

Data Management

- SQL

Bioinformatics, Scientific Computing, Data Science, Visualization

#### Document manipulation

LaTeX, Libre Office Suite, Microsoft Office Suite

- Soft skills**
- Excellent organizational and communication skills
  - Ability to work collaboratively with people at all professional levels
  - Thoroughness, with rigorous attention to both detail and quality

## PROJECTS

---

- Bioinformatics**
- *Determining protein N-glycosylation with machine learning methods*
  - *Modification and analysis of UPGMA algorithm while using different metrics*
  - *MOVIS: A Multi-Omics Software Solution for Multi-modal Time-Series Clustering, Embedding, and Visualizing Tasks*
- Computer Science**
- *Finding Waldo using various Machine Learning methods*
  - *Image modification and correction with Python*
  - *Determining integer variable ranges using Abstract Interpretation in C++ (LLVM, Clang)*
  - *AVL trees in C programming language*

## SELECTED EVENTS

---

- 2022 • *The 1st International Conference on Data Storage in Molecular Media*. Bielefeld, Germany. (attendee, co-host)
- 2021 • *Symposium on Interdisciplinary Bioinformatics and Biomedical Data Science (IBBMDS)*. Marburg, Germany. (presenter)
- 2020 • *IEEE Visualization Conference (VIS)*. Salt Lake City, Utah, USA. (attendee)
- *Eurographics & Eurovis (EGEV)*. Norrköpping, Sweden. (attendee)

## TEACHING

---

- 2022 • *Guest lecture, Molecules as storage media for long-term data storage*. Faculty of Mathematics, University of Belgrade. Belgrade, Serbia. (presenter)
- 2021 • *Seminar, Information Theory Tools for Visual Computing*. Department of Mathematics and Computer Science, University of Marburg. Marburg, Germany. (co-organizer, presenter)
- *Lecture, Data Visualization*. Department of Mathematics and Computer Science, University of Marburg. Marburg, Germany. (collaborator)

## PUBLICATIONS

---

- 2022 • Anžel, A., Heider, D., & Hattab, G. (2022). *MOVIS: A multi-omics software solution for multi-modal time-series clustering, embedding, and visualizing tasks*. Computational and Structural Biotechnology Journal, 20, 1044–1055. 10.1016/j.csbj.2022.02.012.
- 2021 • Anžel, A., Heider, D., & Hattab, G. (2021). *The Visual Story of Data Storage: From Storage Properties to User Interfaces*. Computational and Structural Biotechnology Journal, 1(1), 1. 10.1016/j.csbj.2021.08.031.

## ADDITIONAL INFORMATION

---

**Driving licence** Category B (cars)

**Interests** Technology, Research, Computer Science, Bioinformatics, Linux, FOSS, Science Fiction, Fantasy, The Matrix, Video games, Hiking