

Tomáš Jelínek

✉ tomgolf.jelinek@gmail.com | 📞 +420 730 693 314 | 🌐 [Desperadus](#) | 🌐 tomasjelinek.eu

SUMMARY

I am a Master's student in Bioinformatics at Charles University, focusing on machine learning for computational biology with interest in protein structure prediction, in silico drug design and representation learning.

EDUCATION

Master's Degree in Bioinformatics, Charles University (Study average: 1.00) 2024 – Present
Bachelor's Degree in Bioinformatics, Charles University (Study average: 1.24) 2021 – 2024

WORK EXPERIENCE

BIOCEV — Research Assistant Nov 2023 – Present

- Analyze proteomics and metabolomics datasets (LC-MS/MS); implement preprocessing and statistical workflows in Python/R.
- Investigate lipocalins—protein structure and ligand interactions—via docking and ML-based scoring.
- Develop reproducible pipelines and visualizations; document methods for BSc/MSc theses under supervision of Prof. Pavel Stopka.
- Used tools: Python, R, scikit, NumPy, Boltz-2, Chai-1, AlphaFlow, Vina, UniDock, RTMScore, etc.

AI Institute — Lecturer, AI Consultant Nov 2024 – Present

- Teach core topics (transformers, diffusion models, training processes) to the general public and practitioners, with over 500+ people trained in person.
- Advise businesses on AI integration (data analysis, automation); prototype end-to-end solutions and deliver practical guidance.

CLIP — Inference of Developmental Pathways from scRNA-seq Data Jun 2022 – Mar 2023

- Worked on an R package to infer cellular developmental pathways from scRNA-seq using discrete differential geometry (Hodge theory) and algebraic topology.

Spike Sneakers s.r.o — Coding, Linux Administration Sep 2022 – Jan 2024

- Built a backend system for sneaker sales and consignments: invoice generation, payment handling, price scraping.
- Administered Linux servers; containerized services (Docker); managed MySQL; integrated via Discord API/webhooks and OCI.

Second Faculty of Medicine — FCD and Glioblastoma Research Jun 2020 – Sep 2021

- Helped in the laboratory during my high school studies.
- Operated a two-photon microscope and scripted in MATLAB for tumor growth analysis.
- Built lab equipment for EEG monitoring (soldering, 3D printing, CAD modeling).
- Performed standard wet-lab procedures.

SKILLS

Programming Python (primary); C#, C++, R (working proficiency)
Tools & Libraries Linux (bash), Docker/Podman, **make**, pandas, NumPy, *scikit-learn*, PyTorch, Keras, TensorFlow, XGBoost, CatBoost, MLflow, Discord API, OCI
Languages Czech (Native), English (Advanced—C1), German (Upper Intermediate—B2/C1), Latin (Basic—A2)