Tomáš Jelínek

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SUMMARY

I am a masters student of bioinformatics at Charles University in Prague. My interest is in machine learning applications in biology and beyond, such as protein structure prediction, in silico drug design or representation learning.

Currently, I am working with Prof. Mgr. Pavel Stopka, Ph.D. on proteomics research and also work as lecturer for AI Institute.

WORK EXPERIENCE

AI Institute - Lecturer, AI concultant   Nov 2024 - Today
- Teach technicalities of AI (transformers, diffusion models, training processes, etc.) to general public.
- Help bussinesses with AI integration, such as data analysis, automation, and more.

BIOCEV - Research Assistant   Nov 2023 - Today
- Work on Bachelor's and Master's thesis and other projects under supervision of Prof. Mgr. Pavel Stopka, Ph.D.
- Proteomics + metabolomics research, mass spectrometry data analysis.
- Study of lipocalins, their protein structure and ligand interactions.
- Used technologies: Python, R, sklearn, pandas, numpy, Boltz-2, Chai-1, AlphaFlow, Vina, UniDock, RTMScore and more.

Spike Sneakers s.r.o - Coding, Linux administration   Sep 2022 - Jan 2024
- System for sneakers sales and consignments.
- Invoice generation, payment handling, price scraping, and more.
- Used technologies: Python, Discord API + webhooks, docker, MySQL, Linux administration, Fakturoid API, OCI, and more.

2nd Faculty of Medicine - FCD and Glioblastoma Research   Jun 2020 - Sep 2021
Help in the laboratory during my high school studies.
- Working with a two-photon microscope and scripting in Matlab (for tumor growth analysis).
- Creation of lab equipment for the mice EEG monitoring room using soldering, 3D printing, and CAD modeling.
- Standard wet lab work.

EDUCATION

2021 - 2024	Bachelor's Degree in Bioinformatics at **Charles University** (Study average: 1.24)
2024 - present	Master's Degree in Bioinformatics at **Charles University** (Study average: 1.00)

Relevant Courses:	Deep Learning, Deep Reinforcement Learning, Machine Learning for Greenhorns, Machine Learning in Bioinformatics, Linear Algebra, Probability Theory, Mathematical Analysis, Discrete Mathematics, Algorithms and Data Structures, Databases, all with mark **1**.

Skills

Coding Skills	Python, also C#, C++, R (but not as proficient as in Python)
Other IT skills	Linux (with bash scripting), docker/podman, make, pandas, numpy, sklearn, PyTorch, Keras, TensorFlow, XGboost, Catboost, mlflow, Discord API, OCI, fakturoid API, Shopify API
Languages	Czech (Native), English (Advanced - C1), German (Upper Intermediate - B2/C1), Latin (Basic - A2)