

# DAVID BURIAN

Enthusiastic ML/NLP engineer in the making

@ david.burian@me.com

Prague, Czechia

dburian

david-burian



I strive to deepen my knowledge of ML and NLP and gain more practice in creating and optimizing ML models. My life goal is to bring the best of NLU and NLP to the public, helping to improve current information retrieval methods and to combat issues such as disinformation and information overload.

## EDUCATION

Charles University, B.Comp.Sc.

Programming and Software Systems

2016-2021

Prague, Czechia

- Gained a deep understanding of data structures, algorithms, and the principles behind mainstream programming languages (Java, C#, C++, Python)

- Bachelor thesis: *Animated visualizations for IVIS framework*

I extended a medium-sized web project both on the front and back end. My work consisted of animation of data visualizations based on time series and real-time data. My contributions were merged upstream and are being used today.

dburian/ivis-core

My thesis (in English)

University of Las Palmas

Erasmus program

2019-2020

Gran Canaria, Spain

Studied how to design better UI for both mobile and web applications.

Charles University, M.Comp.Sc.

Artificial Intelligence

2021-2023

Prague, Czechia

- Became familiar with fundamental ML models, but also with deep network architectures and algorithms relevant in image recognition, NLP, and other fields

- Apart from ML, I played with traditional IR methods and neural machine translation.

- Master thesis: *Document embedding with transformers*

I currently work on a new transformer model to semantically embed long pieces of text. I strive to deepen my knowledge of NLP and models such as Longformer, SBERT, or BigBird.

## TECHNICAL SKILLS

- Data manipulation and visualization in Python — proficient in Pandas, NumPy, Matplotlib
- Designing, testing, profiling and optimizing of (deep) network architectures with TensorFlow and TensorBoard
- Experience with Scikit, PyTorch and C++

## EXPERIENCE

Finalist in Qminers Hackathon

qqh.fel.cvut.cz

In a small team of friends, we tried to beat an artificial bookie using ML and were able to qualify for the final round.

Freelance full-stack developer

fact.cz/en

filipkorch.com

I have built multilingual websites with dynamic content from the ground up using Node.js, Express.js, Webpack/Vite, and ReactJS/SvelteKit.

Riptech solutions — Mobile development

2021-2022

riptechsolutions.com

I have helped to build mobile applications in Flutter in a dynamic small team.

## SIDE-PROJECTS

- C++ library for multithreaded filesystem operations

dburian/cpp\_mfo

- C# .NET GUI recreation of Midnight Commander

dburian/FileManager

- Various Neovim plugin extensions written in Lua

dburian/cmp-markdown-link

dburian/telescope-markdown-links

## LANGUAGES

I am fluent in English and Czech. I also speak basic Spanish.

## HOBBIES

I am an amateur beach volleyball player and an occasional climber. I enjoy visiting the opera or playing the guitar. I am enthusiastic about data visualization and understanding, note-taking, and Neovim.