# Tomáš Chobola

M.Sc. Student · Data Engineering and Analytics · Munich, DE

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# **EDUCATION**

Technical University of Munich

M.Sc. Data Engineering and Analytics.

November 2020-

Czech Technical University in Prague

Bc. Knowledge Engineering. CERN certified thesis:

October 2016-July 2020

Study of light-by-light scattering with the ATLAS Forward Proton (AFP) Detector at CERN

The Hong Kong Polytechnic University

Computer Science, Study Abroad.

August 2019-January 2020

# EXPERIENCE

eClub Prague

February 2020–December 2020

Conversational AI Researcher. Remote work, 1-2 days/week.

Using TensorFlow and PyTorch to adapt Transformers and other NLP models for the end-of-utternace detection.

### Faculty of Information Technology, CTU

July 2020-November 2020

Research Assistant.

Researching and extending the state-of-the-art models for few-shot classification, and implementing them in PyTorch and Tensorflow.

#### Faculty of Information Technology, CTU

May 2019-August 2019

Research Assistant.

Researching symmetric heterogeneous transfer-learning models with auto-encoders and GANs for image-to-image translation setting, and implementing them in Tensorflow.

#### Institute of Experimental and Applied Physics, CTU

February 2019–July 2020

Research Assistant.

Applying regression tools (Python, C++), mainly Gaussian Process, and Monte Carlo simulations in analysis of data obtained from the ATLAS experiment. Working closely with the international collaboration of researchers at CERN.

### Commerzbank AG, Prague

March 2019-July 2020

Junior Software Specialist. 2-3 days/week.

Carrying out workflow and database improvements with bash and SQL scripting.

### **PUBLICATIONS**

Transfer learning based few-shot classification using optimal transport mapping from preprocessed latent space of backbone neural network. arXiv:2102.05176.

T. Chobola, D. Vašata and P. Kordík. 35<sup>th</sup> AAAI Conference on Artificial Intelligence. Virtual. February 2021.

Unsupervised Latent Space Translation Network. arXiv:2003.09149.

M. Friedjungová, D. Vašata, **T. Chobola**, M. Jiřina. In Proceedings of 28<sup>th</sup> European Symposium on Artificial Neural Networks, Computational Intelligence and Machine Learning. Bruges, Belgium. October 2021.

# Talks & Presentations

#### DPG-Frühjahrstagungen (DPG Spring Meetings).

Virtual conference, presenting data analysis of the ATLAS experiment at CERN. March 15, 2021.

#### AAAI Workshop on Meta-learning with co-hosted Competition.

Virtual conference, contributed talk and poster presentation. February 9, 2021.

# Grants & Awards

AAAI 2021 MetaDL Challenge 2<sup>nd</sup> Place Prize.

Student Summer Research Program 2020 of FIT CTU in Prague Grant. Support of the image transfer-learning research project.

Student Summer Research Program 2019 of FIT CTU in Prague Grant. Support of the few-shot meta-learning research project.

## EXTRACURRICULAR ACTIVITIES

CTU Toastmasters club member. 2019.

Organising the IAESTE Job Fair at CTU in Prague. 2018.

Organising the international symposium Humans in Space and assisting the scientific committee. 2015.

# SKILLS

### Programming languages

- Working knowledge of C/C++
- Python for scripting, data analysis and machine learning applications and modelling
- Basic knowledge of Java
- Data analysis and visualisation with R
- Query optimisation and database administration with PostreSQL
- Version control systems (Git)
- Documentation with LaTeX and Markdown
- Unix-based systems knowledge

#### Languages

- Czech Native
- English Professional working proficiency
- German Elementary

February 21, 2021

Tomáš Chobola

I hereby authorise the use of my personal data in accordance to the GDPR 679/16 – "European regulation on the protection of personal data".