



**FACULTY  
OF INFORMATION  
TECHNOLOGY  
CTU IN PRAGUE**

## Assignment of bachelor's thesis

**Title:** Generating music using neural networks  
**Student:** Jan Šimerda  
**Supervisor:** Mgr. Jan Tyl  
**Study program:** Informatics  
**Branch / specialization:** Knowledge Engineering  
**Department:** Department of Applied Mathematics  
**Validity:** until the end of summer semester 2022/2023

### Instructions

This thesis aims to use NLP techniques for the task of music generation/transformation.

Sub-goals are the following:

- Research existing solutions
- Obtain suitable datasets for the task
- Preprocess dataset to be usable as a neural network-based training algorithm input, experiment with different representations
- Implement one or more models using modern neural network architectures such as LSTM, Transformer, etc...
- Discuss/compare model performance