

Bachelor's Thesis Specification



Student: **Mišáková Silvia**
Programme: Information Technology
Title: **Tool for Visualization of Microbiome Data**
Category: Biocomputing
Assignment:

1. Analyse existing tools for visualization of microbial data (Emperor) and for general multidimensional data visualization (Tensorflow Embedding Projector). Assess their strengths and weaknesses with a focus on the needs of microbial research.
2. Based on your findings, propose new tool for microbial data visualization, which addresses some of the shortcomings of existing methods, especially relating to the ease of use and usefulness of their interface.
3. Implement the proposed tool.
4. Evaluate achieved results and discuss possibilities of future continuation.

Recommended literature:

- According to supervisor's instructions

Detailed formal requirements can be found at <https://www.fit.vut.cz/study/theses/>

Supervisor: **Smatana Stanislav, Ing.**
Head of Department: Sekanina Lukáš, prof. Ing., Ph.D.
Beginning of work: November 1, 2020
Submission deadline: May 12, 2021
Approval date: October 30, 2020