

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

Requirements for the first semester:

- Completion of items 1 and 2 from the specification.

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, 2019
Submission deadline: May 14, 2020
Approval date: October 25, 2019