



Comenius University in Bratislava  
Faculty of Mathematics, Physics and Informatics

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## THESIS ASSIGNMENT

**Name and Surname:** Dávid Barbora  
**Study programme:** Computer Science (Single degree study, bachelor I. deg., full time form)  
**Field of Study:** Computer Science, Informatics  
**Type of Thesis:** Bachelor's thesis  
**Language of Thesis:** English  
**Secondary language:** Slovak

**Title:** Multiple Alignment and Visualization of Nanopore Sequencing Signals

**Annotation:** Nanopore sequencing produces signals based on the underlying reference DNA. However, there is a large variability in these signals and at the same time, each position is typically read several times. The goal of the thesis is to develop practical multiple alignment methods for nanopore sequencing signals in order to align them to the reference DNA and to visualize the results.

**Supervisor:** doc. Mgr. Tomáš Vinař, PhD.  
**Department:** FMFI.KAI - Department of Applied Informatics  
**Head of department:** prof. Ing. Igor Farkaš, Dr.

**Assigned:** 31.10.2017

**Approved:** 31.10.2017 doc. RNDr. Daniel Olejár, PhD.  
Guarantor of Study Programme

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Student

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Supervisor