



Comenius University in Bratislava Faculty of Mathematics, Physics and Informatics

THESIS ASSIGNMENT

Name and	Surname:	Andrej	Korman

Study programme: Computer Science (Single degree study, bachelor I. deg., full

time form)

Field of Study: Computer Science Type of Thesis: Bachelor's thesis

Language of Thesis: English **Secondary language:** Slovak

Title: Data Structures for Selective Sequencing

Annotation: MinION sequencing technology allows on-line rejection of molecules that are

sequenced. However, the base calling process (translation of the raw sequencing signals to DNA bases) is too slow to perform on-the-fly. The goal of this thesis is to develop an indexing scheme and data structures that would allow fast identification of individual molecules based on raw signals instead of the

corresponding DNA sequences.

Supervisor: doc. Mgr. Tomáš Vinař, PhD.

Department: FMFI.KAI - Department of Applied Informatics

Head of prof. Ing. Igor Farkaš, Dr.

department:

Assigned: 30.10.2019

Approved: 30.10.2019 doc. RNDr. Daniel Olejár, PhD.

Guarantor of Study Programme

Student	Supervisor