



Master Programme
Life Science Informatics (LSI)

Notification
Topic of Master's Thesis

Last/first name: Shreya Kapoor

Matrikel #: 3200588 E-Mail: s0shkapo@uni-bonn.de

Address: 402, Am Jesuitenhof 1, Bonn 53117

requests the following topic for her/his Master's Thesis in *Life Science Informatics*:

Extracting most predictive subgraphs from models of human brain
connectivity

1st reviewer: Prof. Dr. Thomas Schultz

2nd reviewer: Prof. Dr. Holger Fröhlich

Short description of the envisaged computer science content of thesis:

Classification based on graphs derived from MRI scans to identify

subregions in the brain that show differences in connectivity between

different subjects. The goal is to derive the most explanatory

subgraph from whole-brain connectivity that has high discriminatory power

and also encodes important biological properties.

Short description of the envisaged life science content of thesis: _____

The subgraphs derived from the classification problem can help identify
ROIs and connections in the brain important for classification of subjects.
Connectomics remains the basis of the graphical representations;
one aim is to be able to backtrack results to the corresponding
fiber tracts and study them in detail.

Begin (date): 22.05.2020

The thesis must be delivered within 6 months after the above date, unless this period has been explicitly prolonged by the examination board. A written application for prolongation is possible. If accepted, the deadline for submission may be extended up to 6 weeks.

1st reviewer 's signature


Student's signature

2nd reviewer 's signature

Is the topic of the Master Thesis potentially subject to intellectual property rights issues (mandatory information)?

Yes ☐

No ☒

Date of deadline for submission of Master's thesis: _____

Approved:

Prof. J. Bajorath
Head of the LSI Exam Board

Prof. M. Hofmann-Apitius
Member of the LSI Exam Board

Prof. T. Berlage
Member of the LSI Exam Board

All mandatory courses have been successfully completed _____

Full credit points in all modules have been obtained _____

Addendum to the Notification about the Topic of the Master's Thesis

The above mentioned Master's Thesis will be carried out at an institution outside of the University of Bonn.

Name of the Institute_____

Address of the Institute_____

The contact person at the Institute at which the Master's Thesis is carried out is:_____

Phone:_____

Fax: _____

e-mail:_____

Approved:

Prof. J. Bajorath
Head of the LSI Exam Board

Prof. M. Hofmann-Apitius
Member of the LSI Exam Board

Prof. T. Berlage
Member of the LSI Exam Board