Rheinische Friedrich-Wilhelms-Universität Bonn



Bonn-Aachen International Center for Information Technology

Master Programme

Life Science Informatics (LSI)

Notification

Topic of Master's Thesis

| Last/first name: _ | Shreya Kap | oor | | | |
|----------------------------|---------------------------------------|------------------|--------------------------------------|--|--|
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| Address:4 | ss: 402, Am Jesuitenhof 1, Bonn 53117 | | | | |
| requests the follo | wing topic for her | :/his Master's ∃ | Thesis in Life Science Informatics: | | |
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| | | | | | |
| | | | | | |
| 1 st reviewer:F | Prof. Dr. Thoma | as Schultz | | | |
| 2 nd reviewer: | | | | | |
| Short description | of the envisaged | computer scie | ence content of thesis: | | |
| Classification | based on grap | ohs derived | from MRI scans to identify | | |
| subregions in | the brain that | show diffe | rences in connectivity between | | |
| patients and h | nealthy contro | ls. The goal | is to derive the most explanatory | | |
| subgraph fror | m whole-brain | connectivit | y that has high discriminatory power | | |
| and also enco | odes importan | t 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 contributing to the | e mechanism of a | | | | | |
| neurological disorder. Connectomics remains the basis of the graphical | | | | | | | |
| | | | | | | | |
| representations, one aim | is to be able to backtrack i | <u>esults to the corre</u> sponding | | | | | |
| fiber tracts and study the | m in detail. | | | | | | |
| Begin (date): | | | | | | | |
| The thesis must be delivered within explicitly prolonged by the exampossible. If accepted, the deadline | nination board. A written applica | ition for prolongation is | | | | | |
| 1 st reviewer 's signature | Studer | nt's signature | | | | | |
| 2 nd reviewer 's signature | | | | | | | |
| Is the topic of the Master Thesis (mandatory information)? | s potentially subject to intellectu | al property rights issues | | | | | |
| 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 | | |
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| Address of the Institute | | |
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| The contact person at the Inst | itute at which the Master's Thesis | is carried out |
| is: | | |
| Phone: | | |
| Fax: | | |
| e-mail: | | |
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| Approved: | | |
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