Student Research Assistant (m/w/d)

We are looking for a student research assistant in the domain of uncertainty quantification in radiation therapy!

June 30, 2020

Your tasks

You would work within the project "Uncertainty Quantification in Radiation Therapy", supporting us in transferring developed methods and software packages into more efficient, usable formats. More concretely, this would entail translating code from Matlab to C++, documenting code and writing extensions to popular Monte Carlo dose calculation engines (e.g. MCSquare/Topas) or the radiotherapy planning tool Matrad - all with the overall goal to make our research results and methods more readily and openly available to the community. In addition, you could work on optimising existing implementations in order to make them more computationally efficient and bring out the methods' full potential.

Personal qualifications

Optimally, you should have

- experience in programming with C++ and Matlab/Python
- some knowledge on efficient programming/code optimisation
- necessary mathematical and physical understanding to be able to comprehend the methods and overall project topic
- interest in the project.

If you are unsure or do not fully fulfill all of the above requirements, but are highly motivated and feel like you could be able to support us, don’t hesitate to contact us. Then we can find out together whether you are suited for the tasks.

Ideally, we would like to find a talented student interested in potentially continuing to work in this field, e.g. in the course of a bachelor’s/master’s thesis on a related topic.

Starting date and duration

Could start as soon as possible and stay for the duration of (at least) 6 months

If you are interested please contact Pia Stammer (pia.stammer@kit.edu) with your application and any open questions. We are looking forward to your applications!