Bachelor Project

Analysis of optical coherence tomography angiographic images

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Project description
In collaboration with Roskilde Hospital, we record, analyze and segment OCT angiography images from patients of the dermatology department.
Upon carcinogenesis, the cutaneous vessel structure changes from being relatively ordered towards being more chaotic. Using OCT angiography, this change in vasculature can be imaged. However, analysis and interpretation of the images is challenging and time-consuming. This project aims at simplifying this process by implementing computer based or computer assisted analysis of the images.
The project therefore includes collaboration with medical staff at the Roskilde Hospital, where the images are recorded, and consists of developing a software workflow, using Matlab or ImageJ or similar, for the analysis of these images.

Prerequisites
- MATLAB and/or ImageJ
- Image processing
- Basic understanding of OCT

Practical details
Our group is located at Risø Campus. Due to the programming-heavy work, the project can also be conducted location-independent.

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