

BSc/MSc-project for students in Biomedical Engineering, DTU/KU

Title: Forensic age-at-death estimation using CT scanning of bones

Description:

Age-at-death estimation of unidentified human skeletal remains or badly decomposed corpses is one of the most important steps in constructing a biological profile. Most methods for age estimation in adults involve evaluating macroscopic morphological features of the bones that change over the course of a lifetime. Evaluation of the same features from 3D models obtained from CT scanning can be difficult, if not impossible. During the project, the student will assess different bones and try to develop a quantitative or qualitative method to estimate an age-at-death looking at morphological changes on 3D virtual bones (vertebrae, femur, ...) The techniques learnt during the project can also be applied on CT scanning of mummies, skeletal remains and clinical cases.

Required qualifications: basic anatomy of the skeleton. Desirable: experience with CT scanning viewers

Responsible institution: Section of Forensic Pathology, Department of Forensic Medicine

Contact information: Chiara.villa@sund.ku.dk

Allowed no of students per report: 1

KU supervisor: Chiara Villa, associate professor at the section of forensic pathology, Department of Forensic Medicine, Faculty of Health and Medical Sciences