



Universität
Basel

Research Project

A statistical inference model of bone anatomy for the corrective osteotomy planning of malunited forearm bone

Third-party funded project

Project title A statistical inference model of bone anatomy for the corrective osteotomy planning of malunited forearm bone

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Organisation / Research unit

Faculty of Science

Departement Mathematik und Informatik

Departement Mathematik und Informatik / Informatik

Departement Mathematik und Informatik / Computergraphik Bilderkennung (Vetter)

Department

Project start 01.06.2016

Probable end 31.05.2019

Status Completed

This project aims at developing a software for the surgical planning of forearm osteotomies.

Contrary to the state-of-the-art, the contralateral healthy bone is not needed as a reconstruction template anymore, because an inference engine predicts the normal (pre-traumatic) bone anatomy. Our approach permits the reduction of the radiation dose by 50%, the 3D planning of bilateral deformities, and the integration into an existing commercial planning service for hospitals.

Keywords Medical Image Analysis, Statistical Shape Modelling

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Add documents

Specify cooperation partners