

MASTER'S THESIS

ZUSE INSTITUTE BERLIN

Reconstructing 3D Implant Geometry from 2D X-Ray Radiographs

Deep Learning Approaches for Medical Image Analysis

Join an exciting interdisciplinary
project at the crossroads of:



3D Scene Rendering

Deep Generative Modeling



Anatomical Shape Reconstruction

This research addresses the **3D reconstruction and quantitative analysis of orthopedic fixations** from post-surgical X-rays, contributing to improved fracture assessment and **clinical decision support**.

You'll work within the **Computational Diagnosis and Therapy Planning** group, led by **Dr. Stefan Zachow**, in a highly collaborative and research-driven environment!



Primary Supervisor: Siloé Bournez - bournez@zib.de

Group Lead: Dr. Stefan Zachow - zachow@zib.de

<https://zib.de/thesis/3d-reconstruction-implant-geometries-2d-radiographs>

