

Novel View Synthesis Project – Master thesis

Research Question

- Given two X-Ray images of a surgical scene, can a model generate a third view of the metal objects in that scene?

Tasks

- Curate and prepare a suitable dataset from available internal databases
- Design a model architecture with embedded CT forward projector (<https://github.com/csyben/PYRO-NN>) and/or view translation layers (<https://github.com/maxrohleder/FUME>)

Who should apply?

- Excellent students from MedTech, AI, CS or similar study programs
- Strong knowledge in Deep Learning (preferably pytorch), CT reconstruction and image processing
- Creative, interested and self-motivated for a very explorative research topic

Contact Maximilian Rohleder (<https://lme.tf.fau.de/person/rohleder>) with a short CV, transcript of records and please describe similar project(s) you've worked on that qualify you for this project.

