



### **Title: Image fusion for multimodal phase contrast CT data**

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Type: BA/PR/DA

Persons: 1-3

Workgroup: Visualization Group

### **Description**

Multimodal data refers to having information about one object from multiple image acquisition techniques. We at the University of Applied Sciences Upper Austria Campus Wels have a phase contrast computed tomography (CT) device, which delivers the three image modalities (see example image above).

The goal of this project is to implement and evaluate different image fusion algorithms for phase contrast CT data.

### **Tasks**

- Literature research
- Implementation of selected image fusion algorithms in our open\_iA framework (see Environment section)
- Qualitative and/or quantitative evaluation of the implemented fusion algorithms

### **Requirements**

- Good skills in C++ and software engineering
- Good knowledge of English language (source code comments and final report will be in English)
- Interest in spatial data visualization

### **Environment**

The project should be implemented as a part of the open\_iA framework

([https://github.com/3dct/open\\_iA](https://github.com/3dct/open_iA))

### **Contact**

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