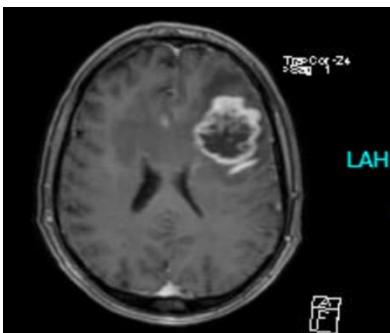




Bachelor/Master Thesis or Student Job

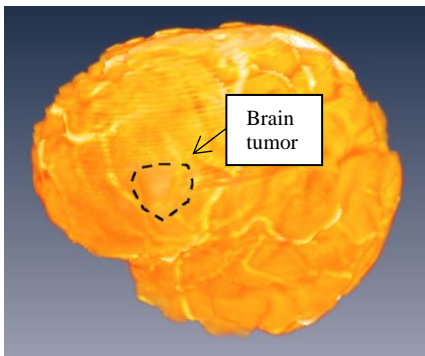
Area: Data Science in Medicine
Topic: Intraoperative Data Management and Workflow Integration

Objectives:

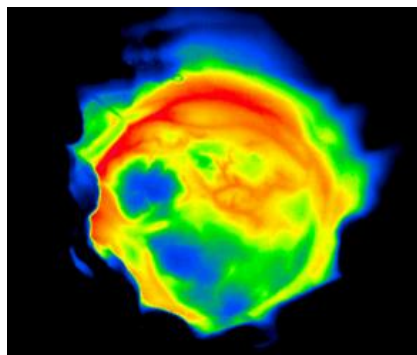


Preoperative MRI

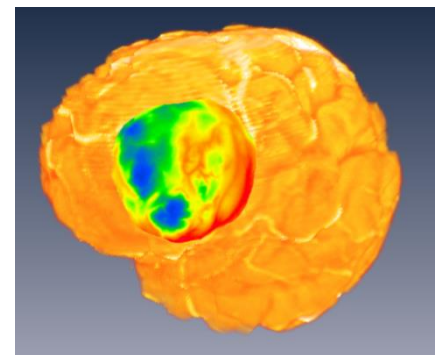
- Requirement analysis for efficient processing of various source data (data throughput, processing efficiency, metadata annotation, privacy, ...)
- Literature research of existing approaches
- Design of a multimodal data management framework for intraoperative use cases
- Implement framework as KNIME extension
- Evaluation on tissue classification workflows



3D model of patient's brain



Intraoperative thermogram



Thermogram matched to brain surface

Language: German or English
Time Frame: As soon as possible
Contact: Nico Hoffmann, Dr. Richard Grunzke
{nico.hoffmann, richard.grunzke}@tu-dresden.de
Professor: Prof. Dr. Wolfgang E. Nagel