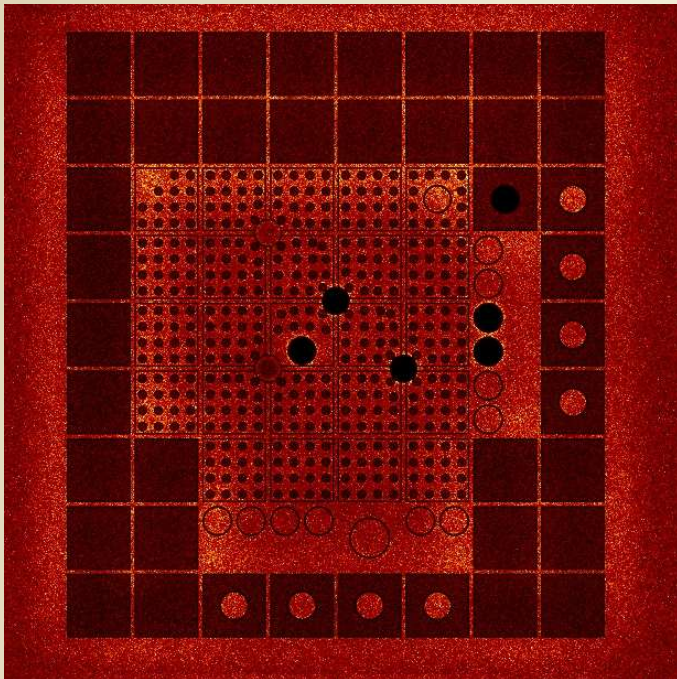


Topic:

Graphics Processing Units (GPU, a.k.a video card) are used for „Ultimate Fidelity” reactor dynamics calculations.

GPU Assisted Reactor Dynamic Analysis, <http://awing.reak.bme.hu/GUARDYAN>



Youtube videos:

- [BME OR](#)
- [VVER-440](#)

Team:

- Előd Pázmán
- Tamás Hajas
- David Legrady

For whom:

- Nuclear Techniques

Skills to acquire:

- Monte Carlo methods
- Programming
- GPU programming
- Theoretical work

Extra:

- publication
- Option for contract

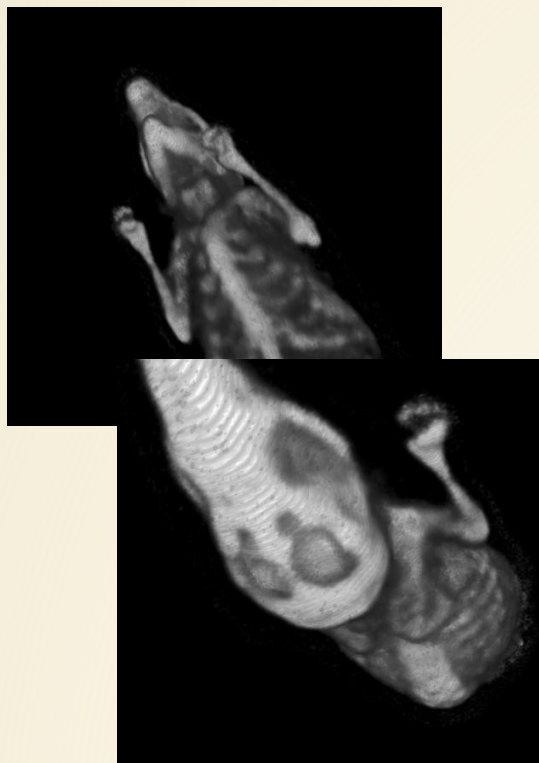
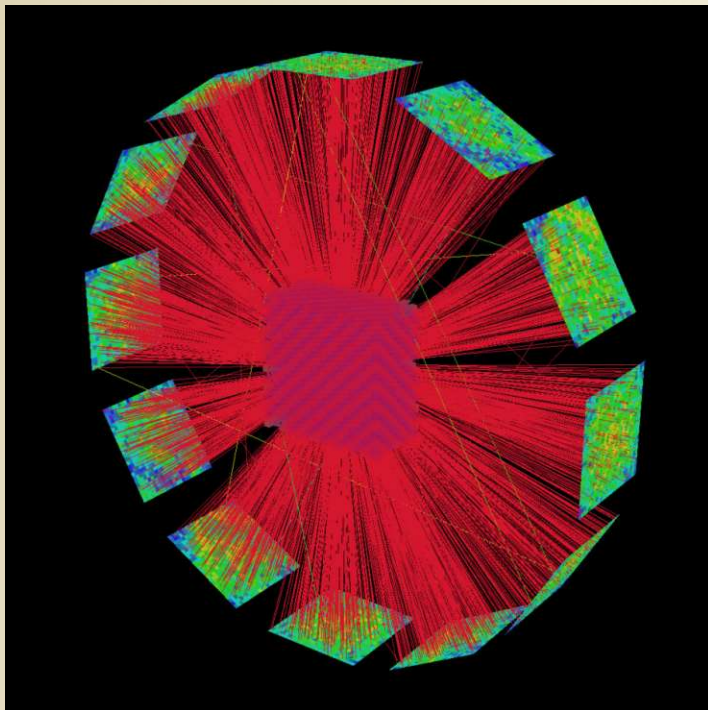
Topic:

GPU-based PET and SPECT image reconstruction software development.

For whom:

- Medical Physics
- Nuclear Techniques

PANNI - Positron Emission Tomography Aimed Novel Nuclear Imager



Skills to acquire:

- Monte Carlo methods
- Programming
- GPU programming
- Theoretical work

Extra:

- Co-operation with Mediso Ltd.

Topic:
CT development at NTI

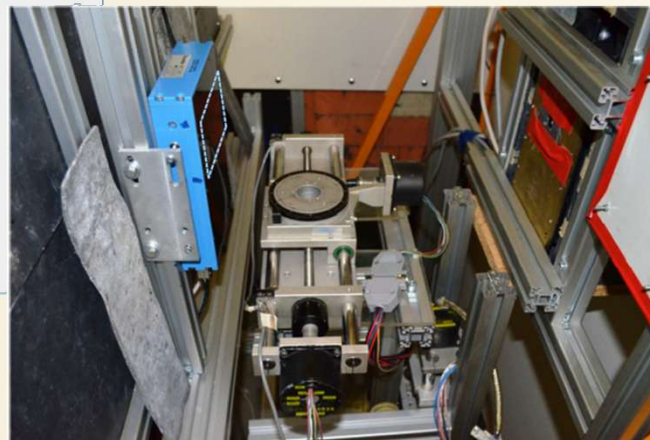
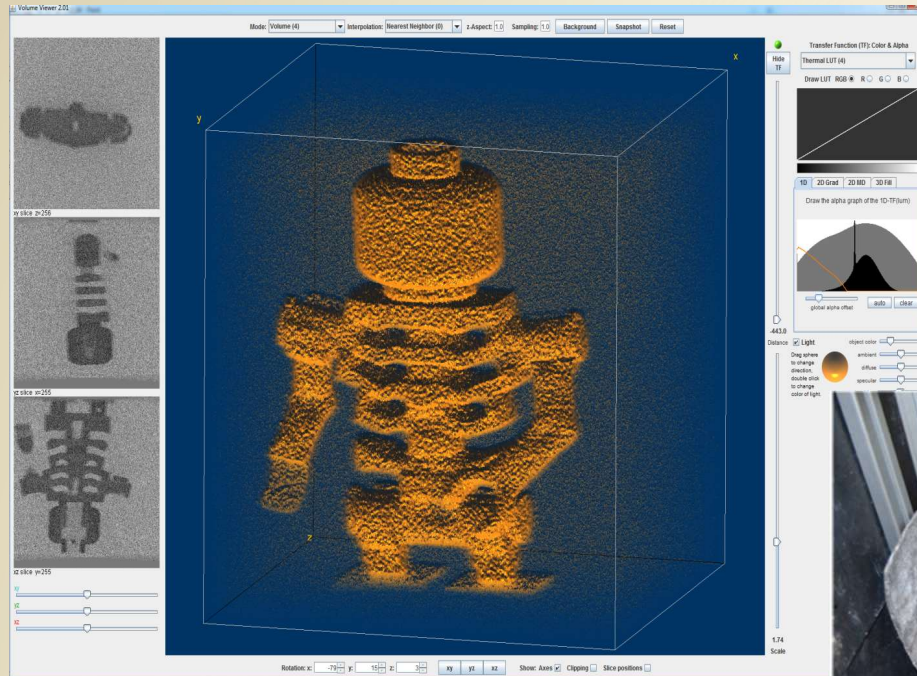
For whom:

- Medical Physics

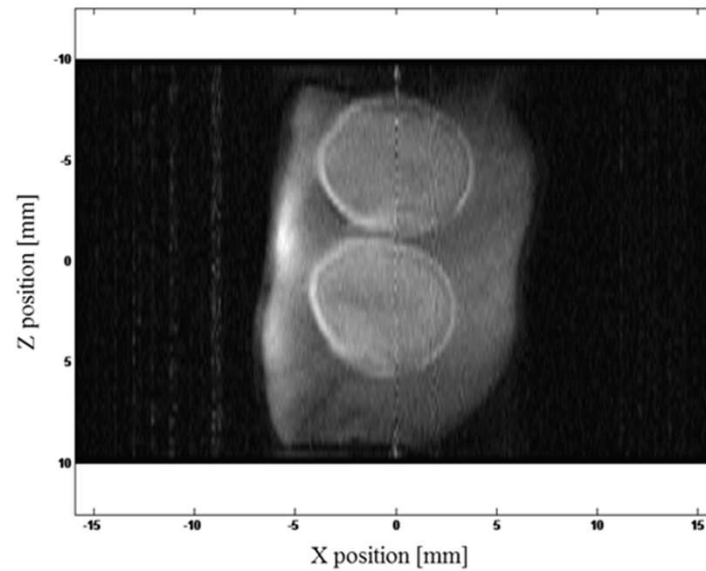
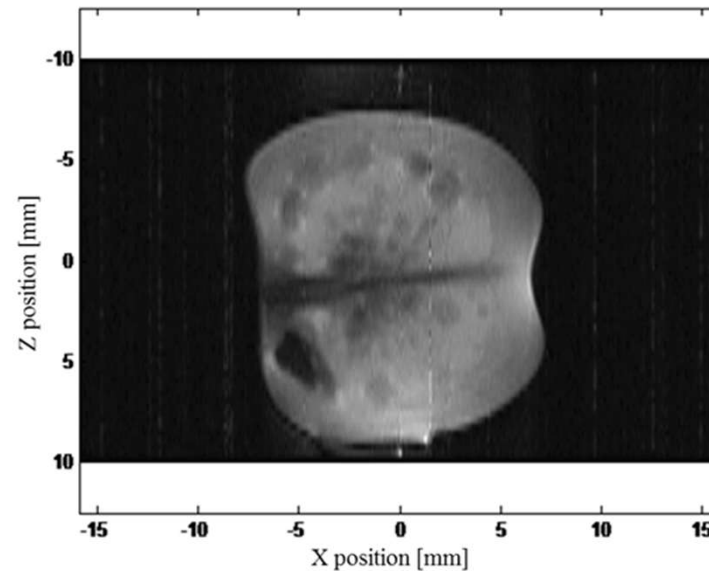
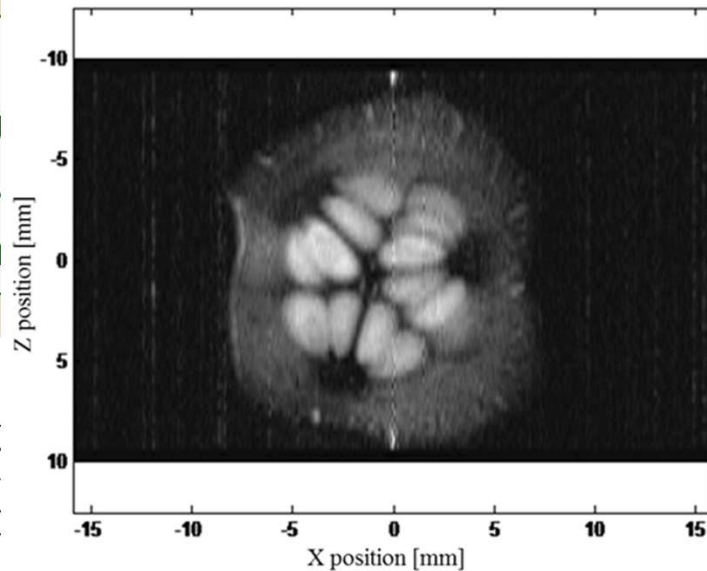
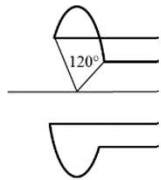
NTI-uCT

Skills to acquire:

- Monte Carlo methods
- Programming
- GPU programming
- CT
- Experimental work



Topic:
3D ima
profess
Curren



Physics

quire:
ming
ental work

d..



Topic:

A 33x33 pixel LYSO PET scintillator module gamma tomography of thicker objects

For whom:

- Medical Physics
- Nuclear Techniques

Skills to acquire:

- Programming
- Theoretical work
- Experimental work

