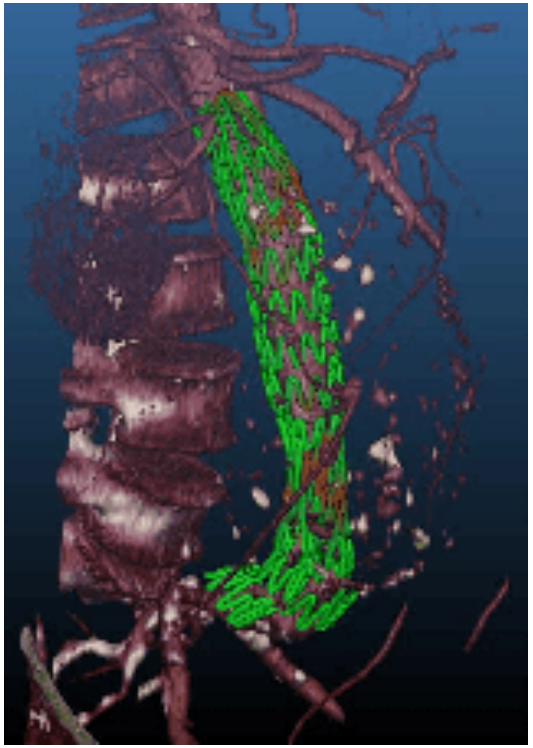
Introductions Vispy code camp

Almar Klein

Where I came from

- Electrical Engineering
- PhD in Medical Image Analysis
  - Started in Matlab
  - Discovered Python (hooray!)
  - Developed Visvis

PhD: Motion of stent grafts



Two years of part-time stuff

- Setting up course on Medical Imaging
- Consultancy
- Develop Pyzo (and IEP)
- Cybermind

Currently: Cybermind

- Specialized in near-to-eye
- HMD: VR and AR
- Tracking

VR, MR, AR

- Virtual Reality (VR)
  only the virtual world matters
- Mixed Reality (MR)
  Virtual and real world are combined, but not necessarily ‘aligned’
- Augmented Reality (AR)
  Virtual and real world are merged: creating an optical effect, modifying the real world

Cybermind - medical

Collaboration:

- University of Twente
- Leuven (be)
- Groningen (nl)

Tracking solutions

Interaction

- mouse + keyboard
- 6DOF mouse
- gestures

Dyverfeldt et al, Linköping University, Linköping, Sweden

Technology

- Unity (Mono, C#)
- Vispy (Python)
- Tracker software (mostly C++)

Requirements

- Scientific and medical vis
  - Volume rendering
  - Interactive plotting
- VR and AR
  - Stereo rendering
  - Performance
  - Interactivity
  - Scene graph