

3D Thermal Image Reconstructions

Short description:

Design and setup a system to generate/reconstruct three-dimensional thermal images from a (2D) thermal camera

Goal:

Thermal imaging enables the detection and display of thermal radiation (heat) emitted by humans, animals or objects. Typical applications for thermal cameras are night vision or building inspections, but there are also first applications within the health sector emerging. Especially the recently lowered hardware costs by introducing smartphone extensions, like FLIR ONE or Seek Thermal, make thermal imaging for a broader market attractive. The aim of this project is to reconstruct three-dimensional thermal images from one or more thermal cameras and evaluate the quality for medical applications.

Note: Biomedical Engineering Students are welcome!

Keywords:

3D, Thermal Imaging, Reconstruction, Visualization

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