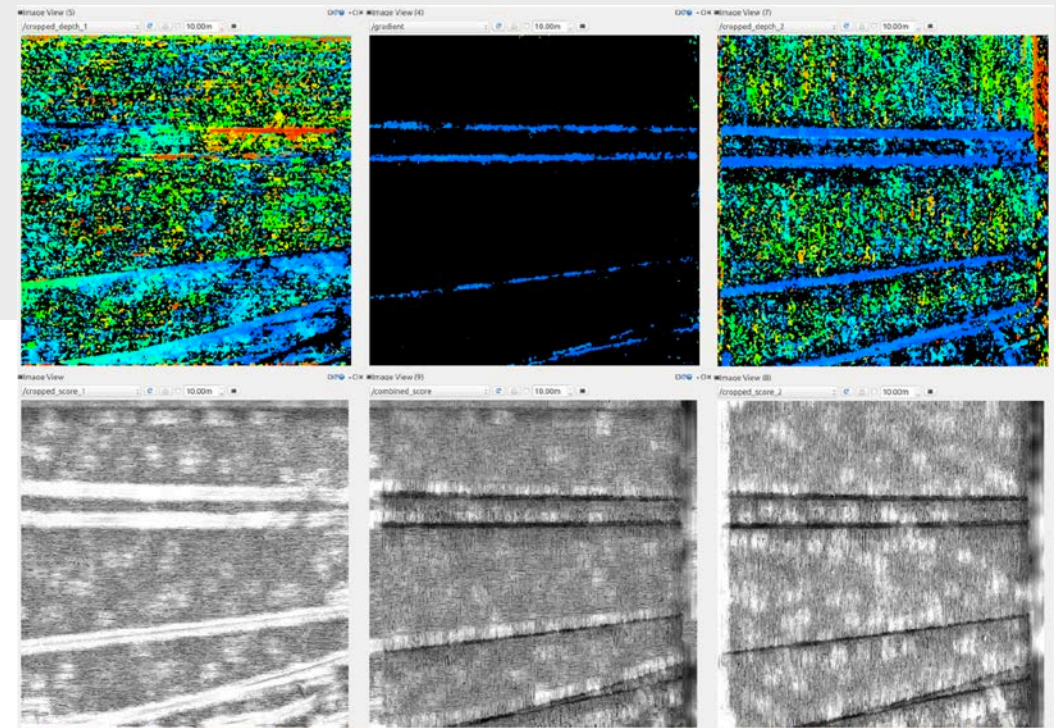


Orthogonal / Trifocal Stereo

Goal: Robust stereo for man-made environments

Description:

- Stereo is a 1D matching algorithm along a line
- Line-shaped texture and geometry can lead to unresolvable failures
- Mostly visible in man-made environments (houses, powerlines, fences)
- The ambiguity in 1D can be resolved with linearly independent matching in orthogonal directions using 3 or more cameras
- The scope of the project is to use the CVG stereo / SfM benchmark dataset to assess the robustness of an orthogonal stereo matching setup in comparison with traditional 2-camera stereo



Requirements / Tools:

Required: C++ / Matlab, some experience with image processing

Recommended: Efficient C++ coding, familiarity with stereo or optical flow and structure-from-motion

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