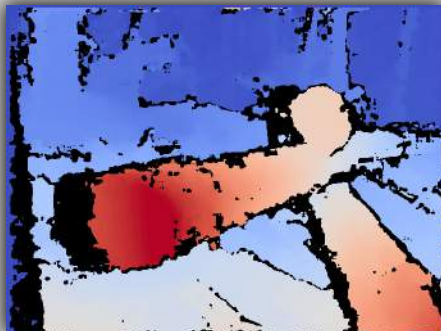




Depth estimation
through stereo vision
in real time!

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VISION TECHNOLOGIES



Stereo vision allows for the estimation of **depth data**, even in situations with direct sunlight. State-of-the-art methods, however, are too slow for real time processing, when implemented in software. This is why we introduce the **SP1** stereo vision system. The SP1 is based on a powerful **FPGA**, which performs all image processing tasks. By using a variant of the Semi-Global-Matching (**SGM**) algorithm, the SP1 provides high quality depth data at high processing rates.

Key Features

- Depth map resolution of 640 x 480 pixels
- 30 frames per second
- Less than 4 W power consumption
- Disparity range of 112 pixels
- Sub-pixel resolution of 1/16 pixel
- Support for various USB industrial cameras
- Output of rectified image and depth map over gigabit ethernet

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