Software Engineering

Kinect based 3D Reconstruction of Human Body

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Objective

The main objective of this project is to create home-made acquisition and processing software for 3D scanning of the human body.

3D Scanning process

We are going to define the 3D scanning process with its different steps:

1. Image Acquisition

2. Image Processing

3. Point Cloud Processing

4. GUI

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Vibot | MAIA

3D Scanning process

Image Acquisition

1

Projection of color image onto depth map

RGB (1920X1080

RGB Mapped 512x424

Depth 512x424

Last RGB Mapped

Image Processing

2

Dept h Thresholding

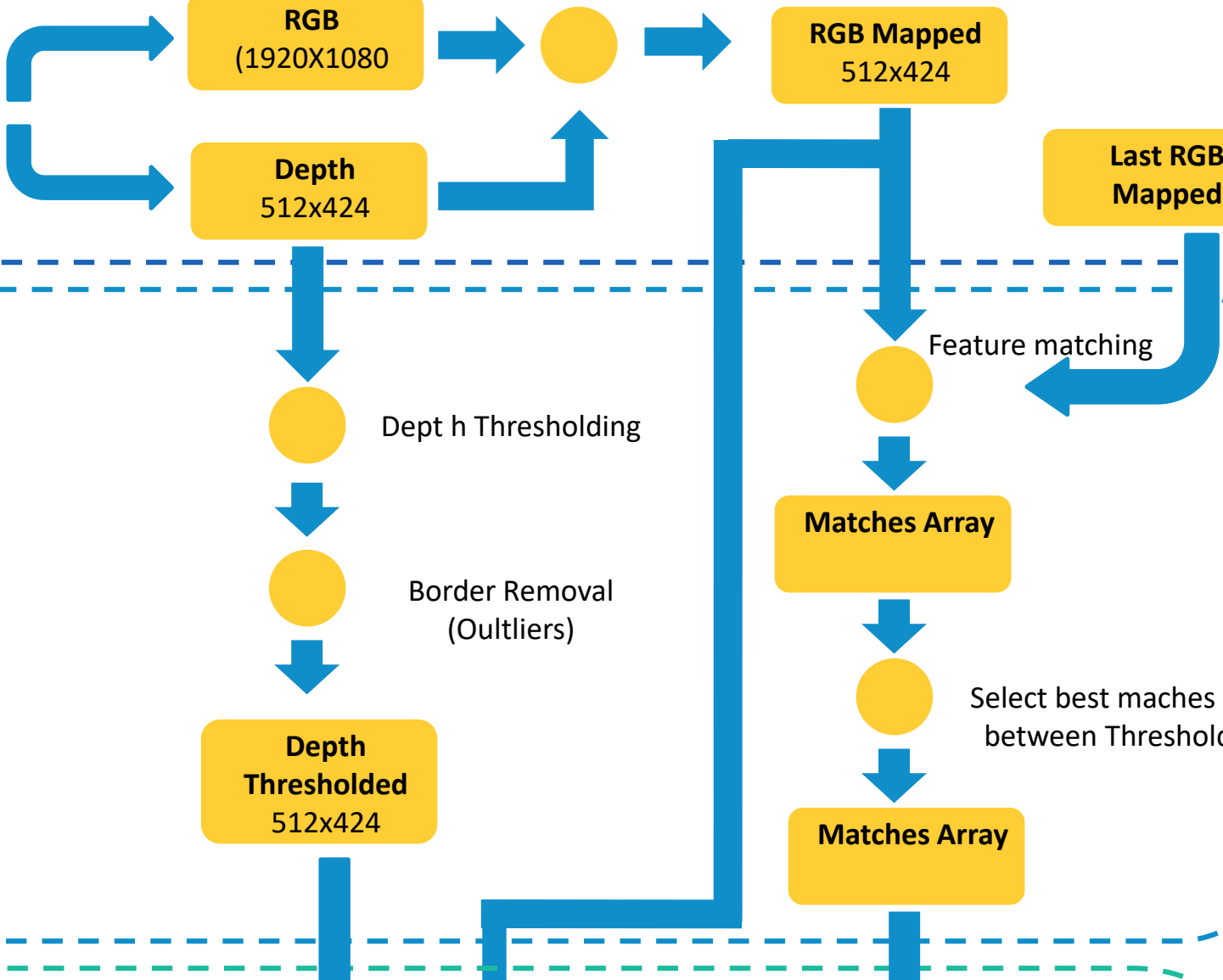Border Removal (Oultliers)

Depth Thresholded 512x424

Feature matching

Matches Array

Select best maches in between Threshold

Matches Array

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