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Slides for the 'Depth map triangulation' project (.pdf) (cviiprojects_depthmaptriangulation.pdf)
Materials for the 'Depth map triangulation' project (.tar, ~51MB)
(Materials_Depth_Map_Triangulation.tar)

Slides for the 'Camera tracking by point cloud alignment' project (.pdf)
(cviiprojects_pclicpcameratracking.pdf)
Materials for the 'Camera tracking by point cloud alignment' project (.tar, ~109MB)
(Materials_ICP_Tracking.tar)

The original (non-converted) depth maps are formatted as single-channel 16-bit images and can be read using OpenCV:

Code example using C++ and OpenCV

```
cv::Mat depth_image = cv::imread( 'depth.png', CV_LOAD_IMAGE_ANYCOLOR | CV_LOAD_IMAGE_ANYDEPTH );
```

Pixel data is stored *in millimeters* and can be retrieved via (the value 0 denotes an invalid depth pixel):

```
unsigned short depth = depth_image.at<unsigned short>(y, x);
```

Approximate ground truth for the camera poses (ICP_quasi_ground_truth_poses.txt)
The camera poses file contains rotation matrices and translation vectors for all 201 frames in the dataset.
Note that the translation describes a part of the matrix transform $\begin{bmatrix} R & t \\ 0 & 1 \end{bmatrix}$; the *actual* camera position can be calculated as $\left(-R^{\top} \cdot t\right)$.

Slides for the 'Understanding and Extending Optical Flow' project (.pdf, by Eddy Ilg) (project_eddy.pdf)
Materials for this project will be distributed to the assigned teams.