How to make a full body 3D scanner

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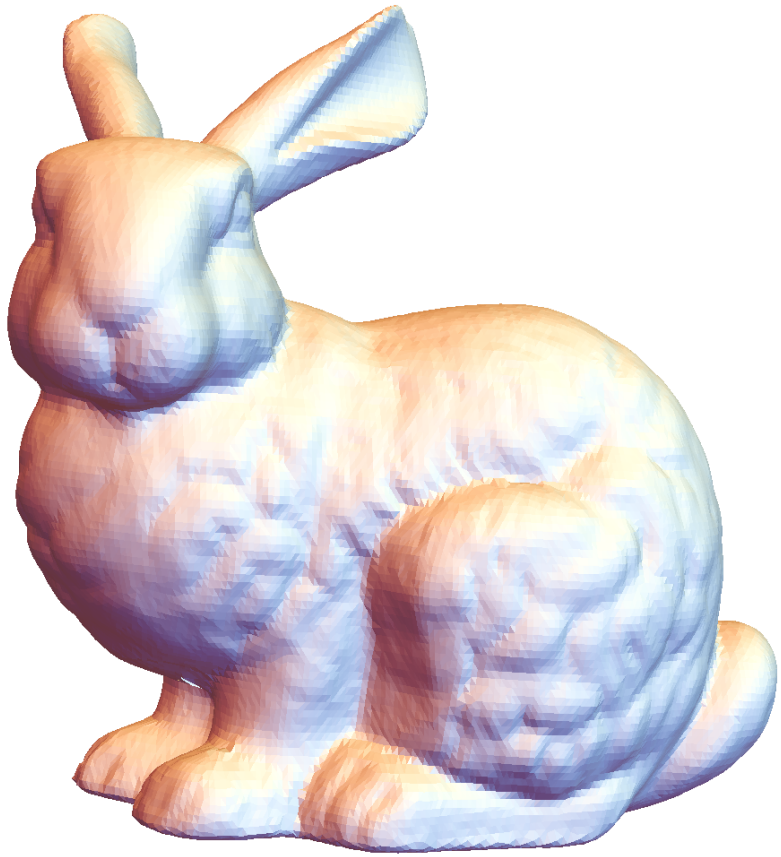
Summer Undergraduate Research Talks

Outline

Outline

3D Reconstruction



3D Reconstruction

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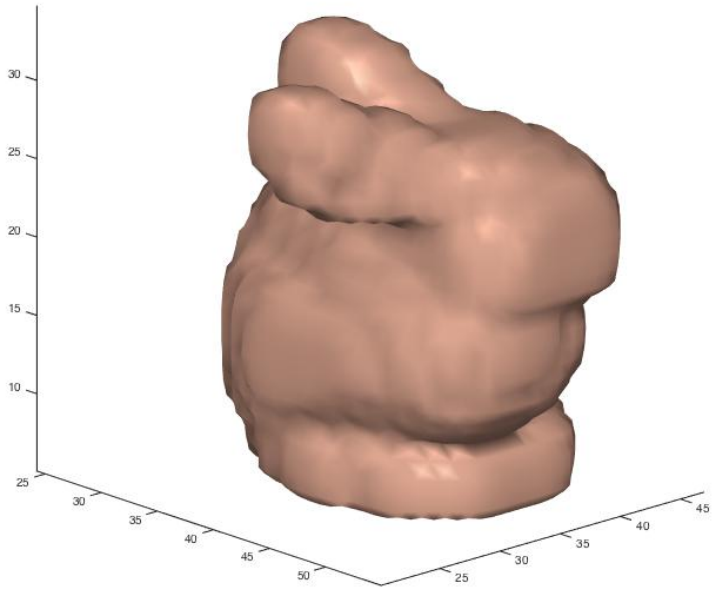
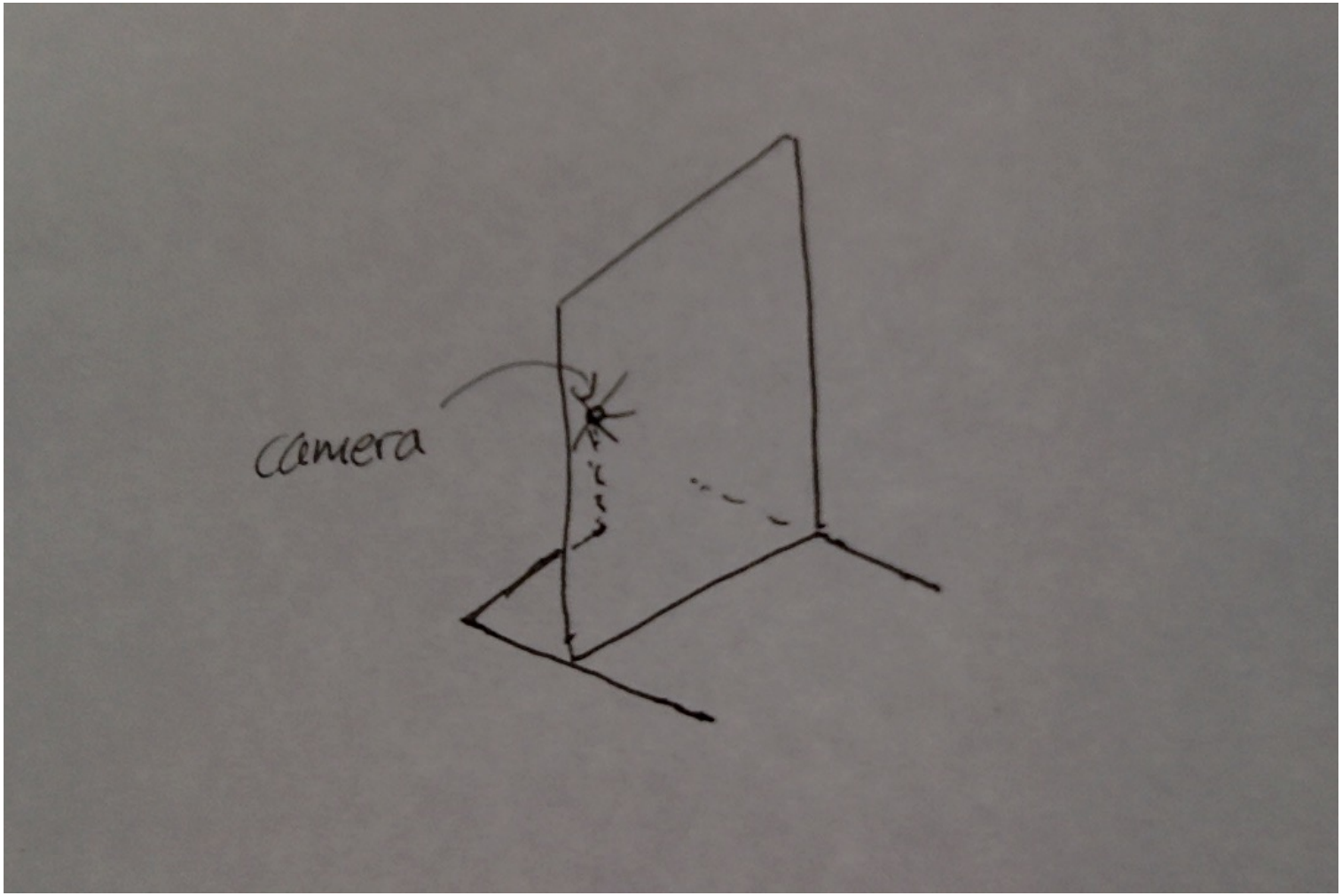
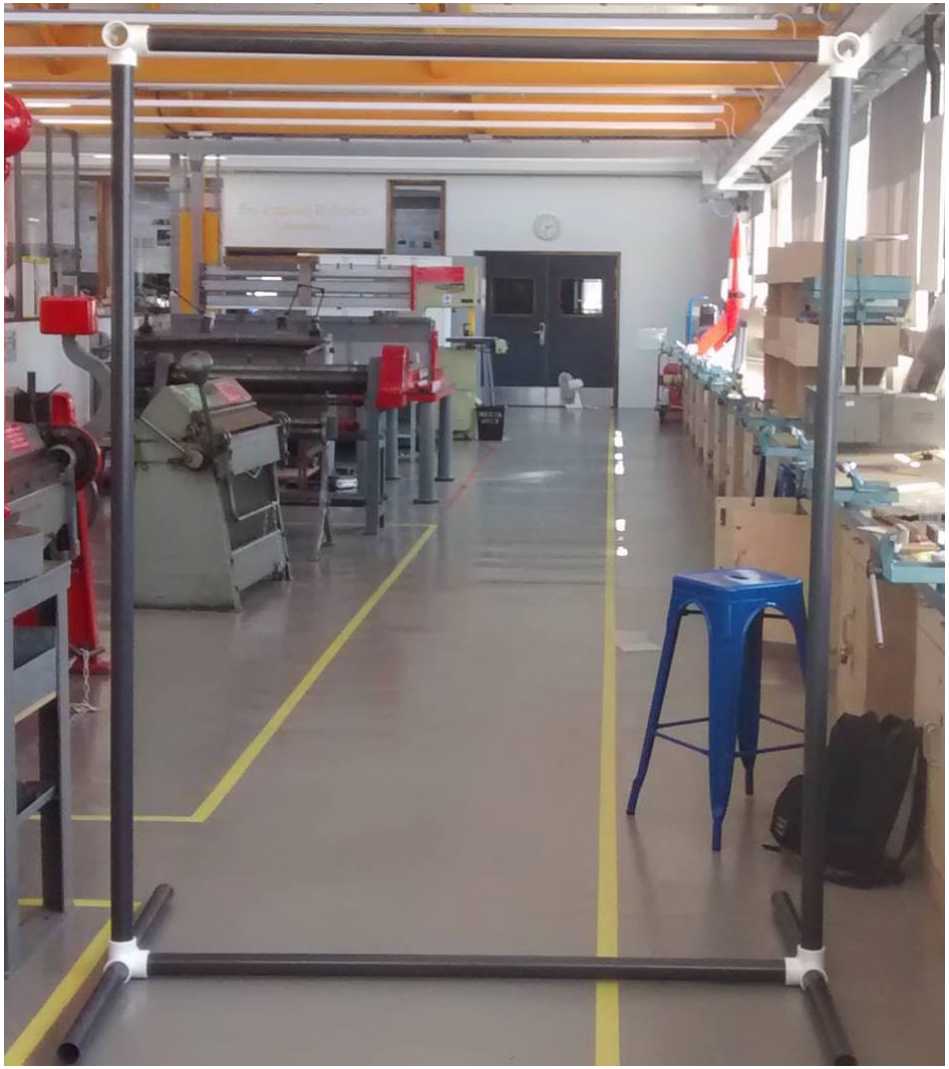


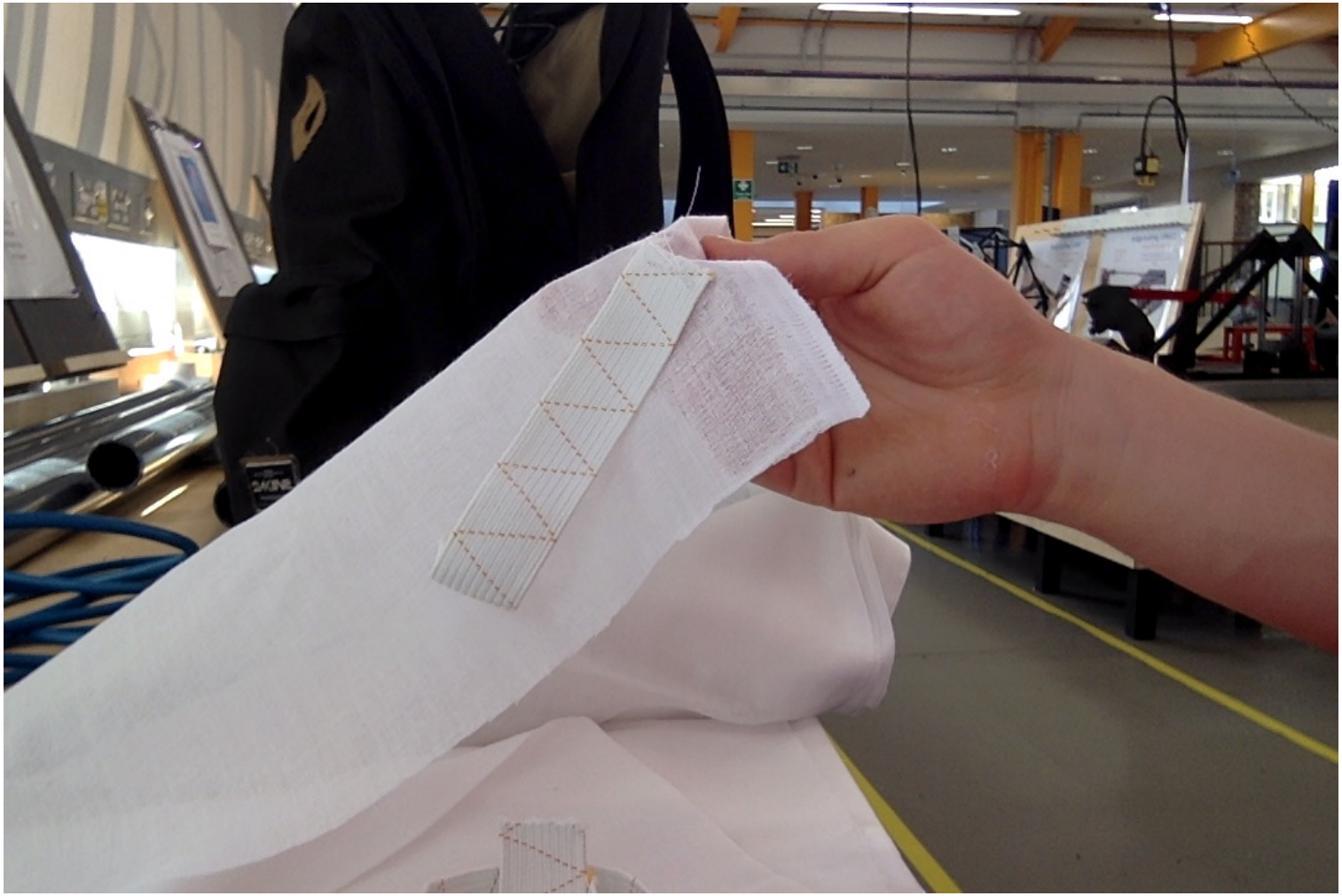
Initial design



Frame is made

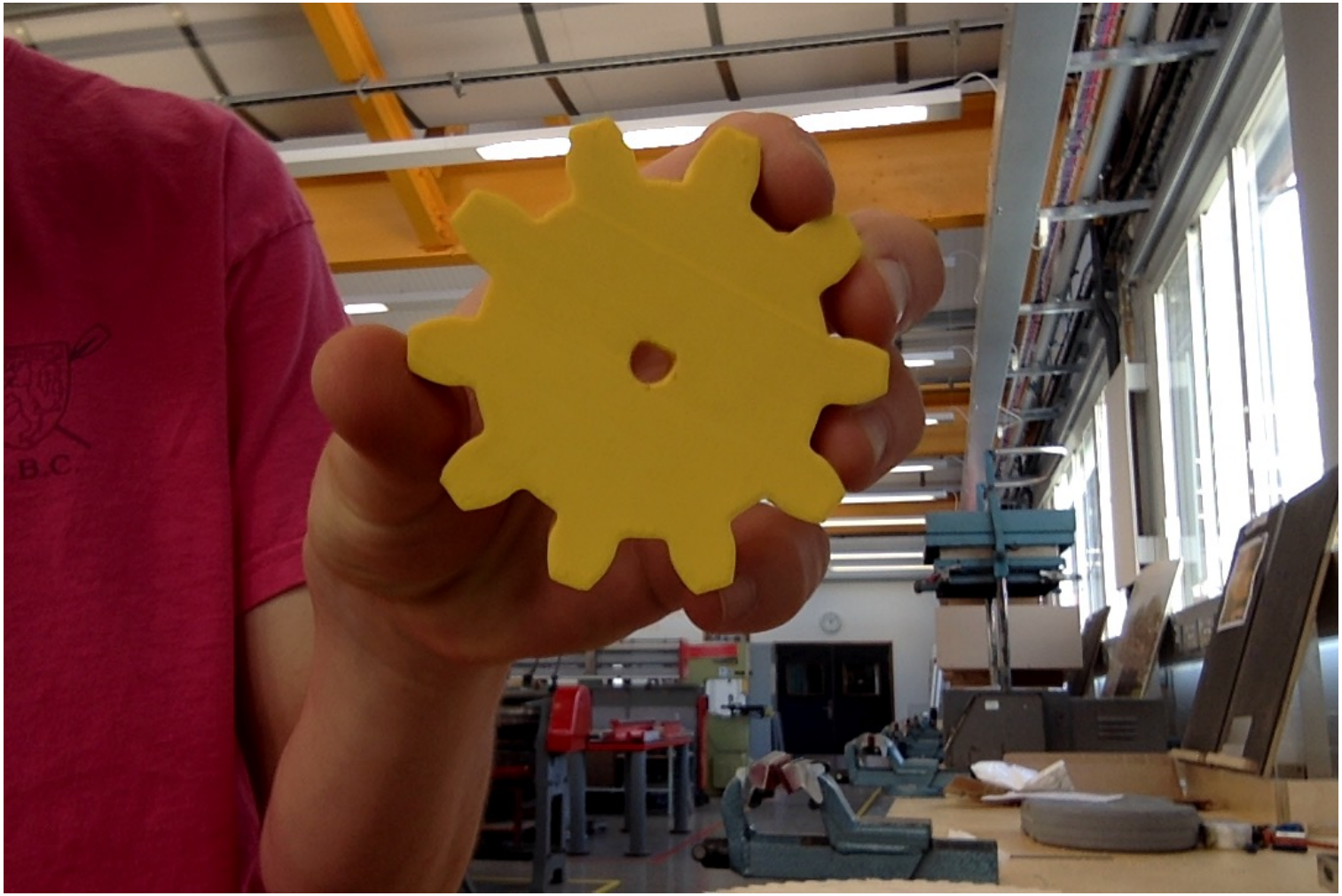


Sewing mathematician in engineering department

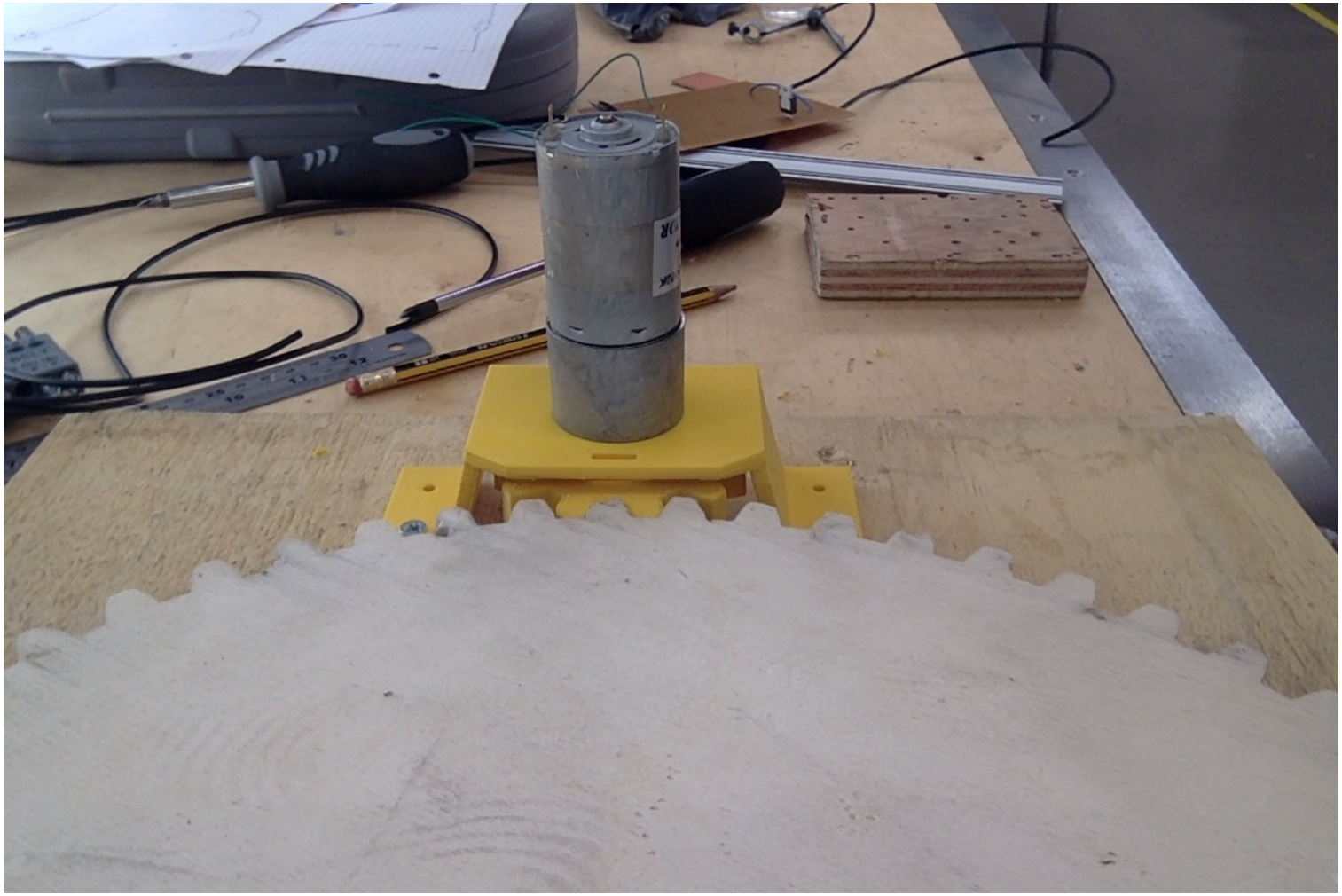


Shadow

3D printing



Making the turntable



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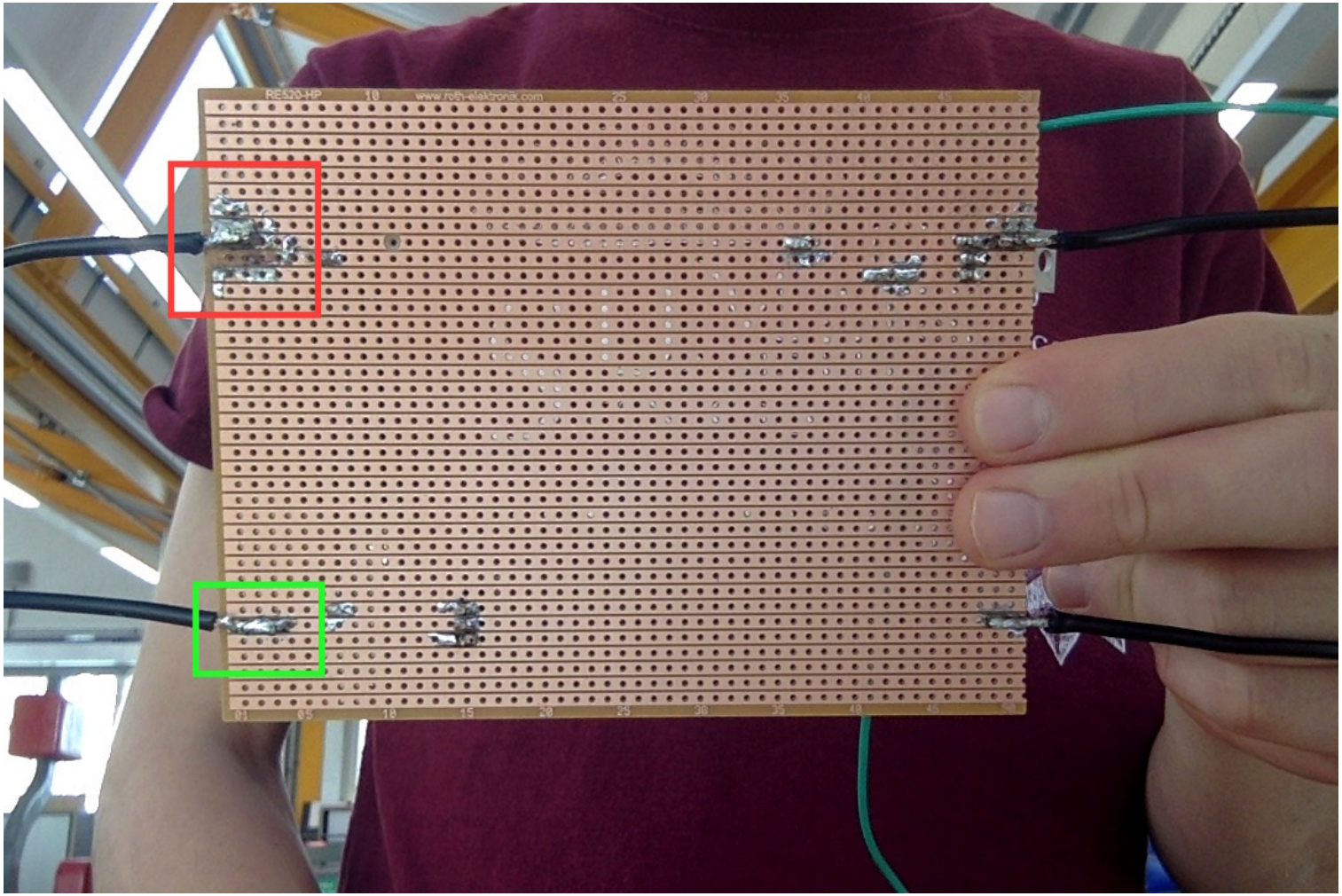
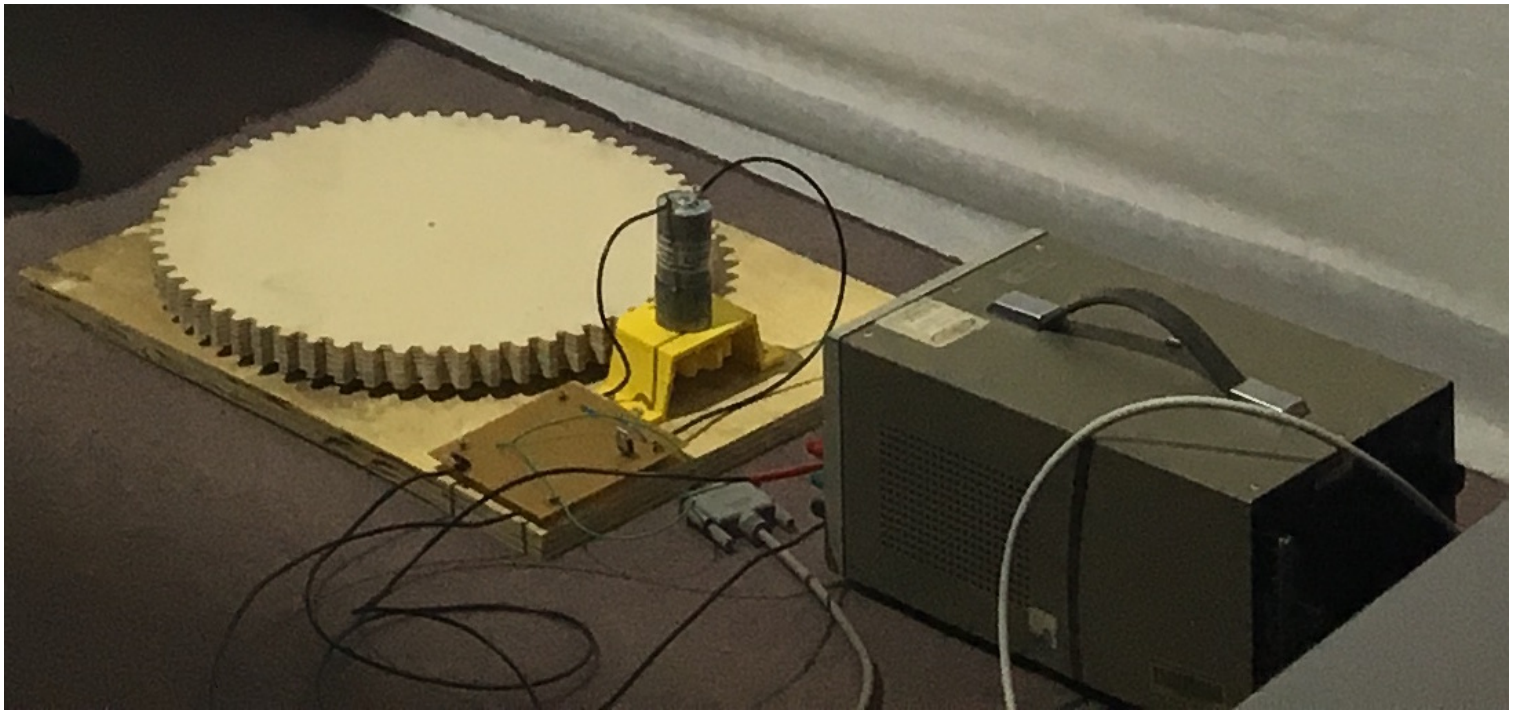
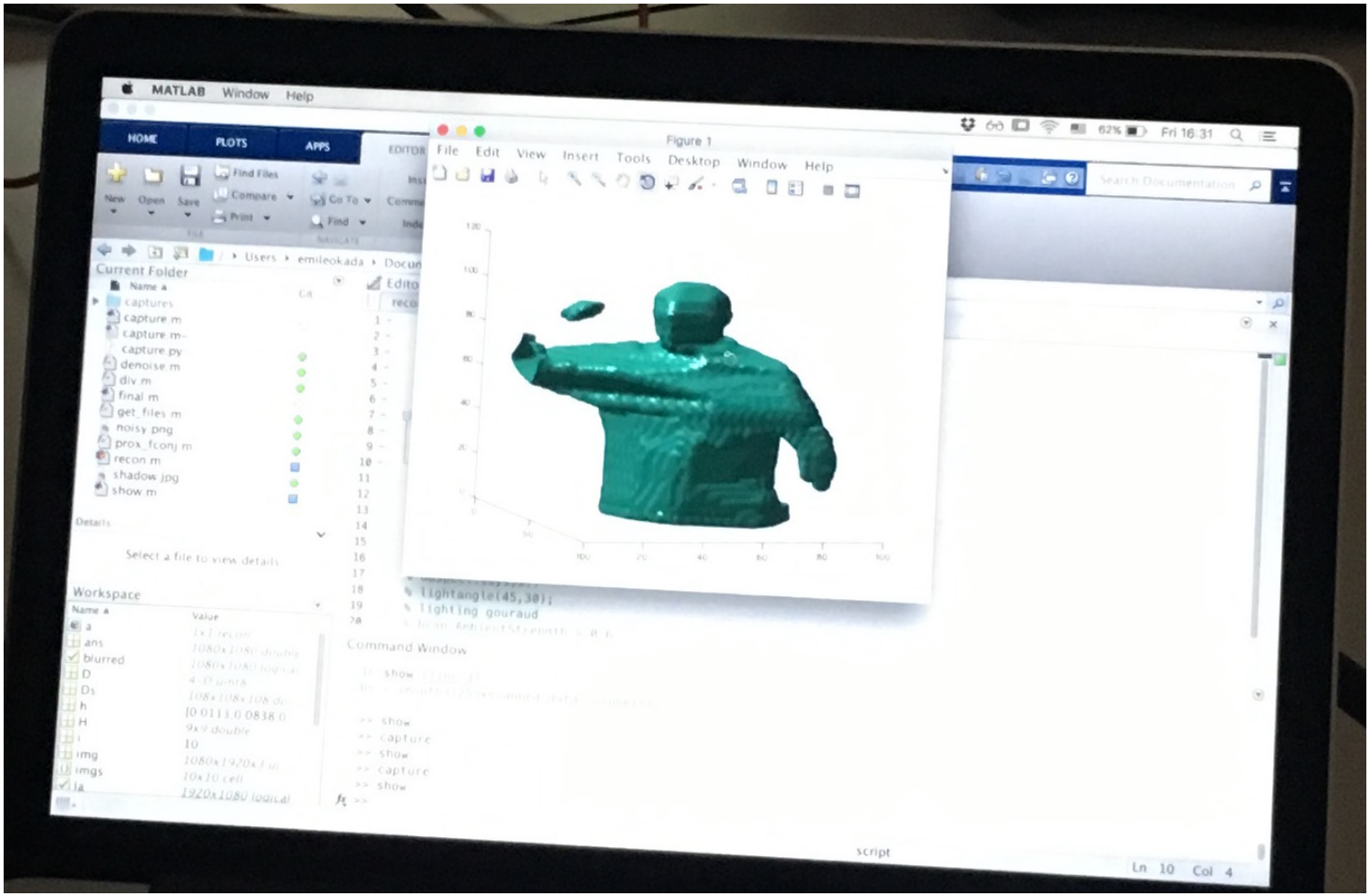


Turntable



Whole set-up

Reconstruction



TV Denoising

$$\min_u \int_\Omega |Du| + \frac{1}{2}\lambda \|u - f\|_2^2$$