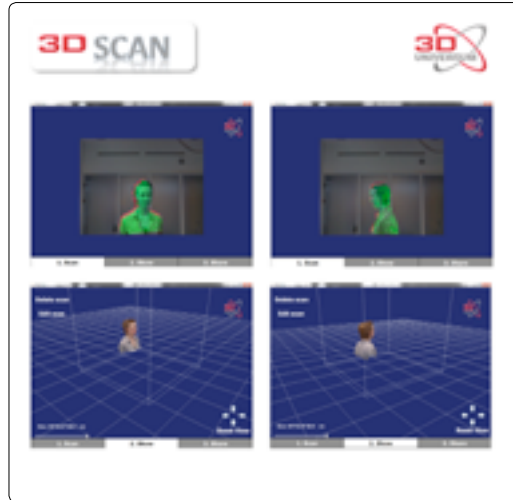


# 10. Scan and print yourself in 3D

The last few years have seen an enormous development in 3D-printing. Consumers can now buy their own printers for use at home. However, if you also want to do your own 3D-scanning of the object you want to print, present laser scanners are far too expensive. We have solved this problem by using a low resolution, low cost depth camera.

In our demo we show the 3D-scanning of objects and scenes, such as faces, bodies, furniture and rooms. To obtain a full 3D body scan, a person stands still on a platform. In less than half minute we perform a 360-degrees full body scan. As a take home gift, you will receive your own 3D scanned or printed body model.



### ICT science question

The main challenge is how to use a low resolution, low cost depth camera to perform real-time 3D-scanning in order to reliably print a 3D-model. The present high resolution 3D-laser scanners cost about twenty thousand euro. These scanners are not affordable by consumers and they are not user friendly. Moreover, the necessity of post-processing makes them less applicable for daily usage. An important sub-challenge is to develop new 3D-modeling solutions that can be used on the consumer market. Like with the scanners, the existing modeling solutions are often too expensive and too complex for consumers.

### Application

We provide a user-friendly and real-time 3D-object scanning solution at a very low cost: about ninety euro. As a consumer you only need our software, a standard computer and a depth sensor in order to scan real world scenes such as faces, bodies, furniture, rooms, cars, art, etcetera. Our solution will help to reduce the gap between 3D-modeling and 3D-printing.



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COMMIT/ project  
INFINITI Information retrieval for Information services

### Alternative Application

3D-printing is broadly applicable and 3D-scanning is an important technology to that purpose. 3D-scanning also offers new business opportunities for real estate agencies, for custom made clothing (eye wear, dresses...) and for the movie industry. 3D-Recording also allows applications in health monitoring and sports. Moreover, a large collection of 3D-scanned real world objects will help the field of artificial intelligence, in particular automatic image recognition.

### Nice to know

With our software you can create a 3D-selfie in less than a minute.



You do not have to invest thousands of euros on 3D scanners or you do not have to spend time to learn complicated 3D CAD systems. This demo provides you a low-cost and real-time 3D scanning solution.



Revolutionize the way you interact with objects such as bodies, rooms, and furniture. They are all in 3D now.



You can scan, visualize, interact and share real-world objects in 3D with a low-cost camera.



Real-time 3D reconstruction and recognition.