

Challenges and Solutions in High Resolution Human Body Scanning

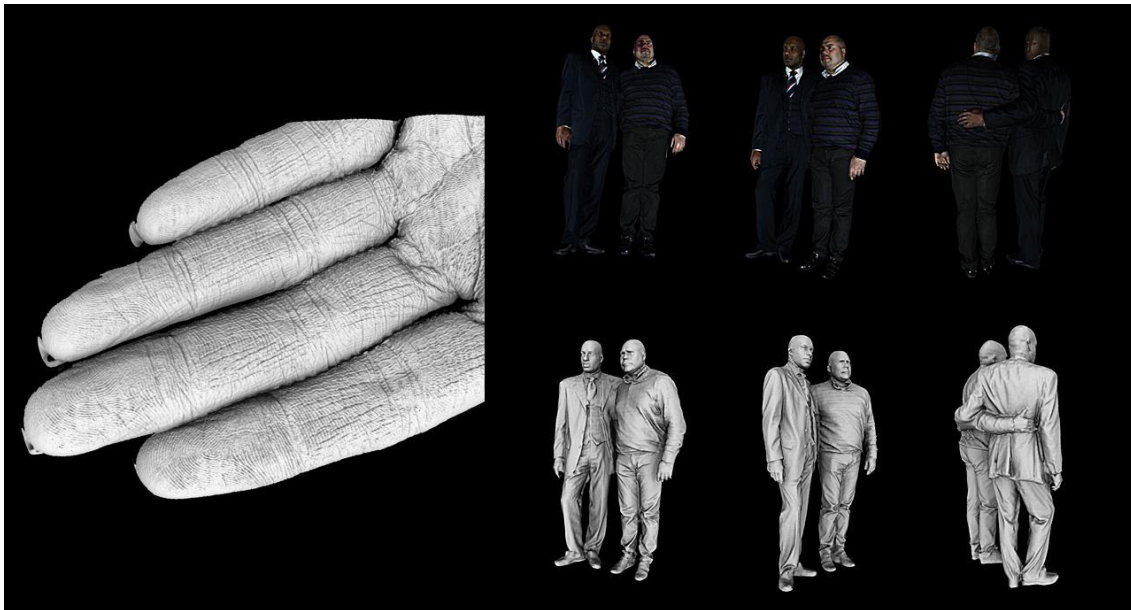
Aivaras GRAUZINIS
4DDynamics*, 's Gravenwezel, Belgium

Abstract

Recent software and hardware development by whole range of academic and commercial organizations introduced a whole range of white light scanning solutions capable of acquiring 3D data with a very high accuracy and speed.

But it remains very challenging to scan living human being at high resolution. Human body motion, large variation of skin and possible garments and whole range of factors adversely affects white light scanning solutions.

We are introducing highly scalable and adaptable 3D white light scanning solution capable of scanning anything from fingerprints to human bodies and even multiple bodies. Our solution can handle motion, reflectance variance and nonlinearities caused by subsurface scattering and complex reflectance properties of different materials. Systems are easy to network and adapt to scan parts of the bodies or full bodies or any fractional region. Our solution acquires both shape and color and is suitable for wide range of industries – from medical to entertainment.



* www.4ddynamics.eu