

Foot Measurements Using Mobile Devices and Typical Pitfalls

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Abstract

The human foot is a complex dynamic 3D object. However, the footwear industry tends to over-simplify it by providing size charts based on foot length only. This presentation will discuss various approaches of how to meaningfully measure human feet with mobile devices. Overall accuracy and user experience will be considered across a range of different options: ARKit/ARCore, structured light cameras, LiDAR, and SLAM with a reference object. Finally, the matching between an individual's feet measurements and a footwear model will be discussed.

Keywords: 3D scanning, foot scanning, footwear, mobile device

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