# 3D Model Generation Using Lidar For Manufacturing of Consumer Goods

# **Company Background:**

We are the Goalkeeper.com Group, a portfolio of businesses catering to the goalkeeper position within the global football market. Goalkeeping is a niche that has been ignored by all major technology providers within the sports tech and materials science world. We are changing that and our team includes Cambridge Astrophysics PhDs, World Cup Legends and an international team of experts. Our clients are Premier League Clubs, Player Agents, National Teams and the largest brands in the world.

### **Project Description:**

We are looking for a team to continue the great work of a prior field session group that built out our scale factor method for measuring finger, hand, and wrist dimensions using standard camera hardware available on mobile devices. On this project we will be utilizing the Lidar function on handsets in order to capture user hand dimensions. The outputs of this project need to be capable of providing the factory with unique dimensions for a pair of human hands which can translate into manufacturing dimensions for products and work in parallel and synchronize with the scale factor method. The intention of this service is to commercialize it further with the largest manufacturer of gloves worldwide.

#### **Desired Skill Set:**

We are looking for a team with an interest in lidar, machine vision, 3D modeling and manufacturing to guide the decision making processes on the technology used to generate the service. This service would likely be utilized within our front end frameworks which are vue, nuxt, node express api, and some php based web frameworks although we don not prescribe a method for this porject.

#### Preferred Team Size:

A minimum of 3-5 members would be enough.

### **Potential For Work:**

We are open to developing this work further and hiring students following the field session depending on how the initial project proceeds. We do plan to retain the IP. We are open to discussing the potential for royalties if the service is functional. Furthermore if there is a machine vision expert which emerges from the group we are working on multiple projects including skeletal tracking, object tracking going forward which are funded.

#### Location for Work:

We are a distributed team and are open to the team working remotely, and organizing meeting times to coordinate with our leadership group. We will likely have one team member in Colorado during the project.