

Abstract

A time card punching system comprising a cloud-based database, a work spot device, and a
5 smartphone carrying a mobile application; wherein the cloud-based database, the work spot
device, and the smartphone performs data communication among each other; the work spot
device can be registered with designated GPS and equipped with Bluetooth smart technology;
when punching a time card, the mobile application can detect if the employee is within five
meters from the work spot device; the mobile application uses a face recognition to prevent
10 buddy punching.

Figure 1 for publication