

by implementing distance-depending weighting factors. Finally, we provided a system in which BLE is well-suited for device-free presence detection.

Future work on this BLE-based dfp system will be twofold: on the one hand-side, we are interested in simplifying the technical equipment, and on the other hand, entity detection is also extendable to BLE-based dfp human counting. Thus it should not only be possible to determine whether, but also how many people are present which leads to a regression problem. With respect to the subclasses of a sensing system mentioned by [12], the extension from *detection* to *tracking* or *identification* is also an interesting field of research. First tests on counting humans by a BLE-based dfp system are very promising but are subject of further investigation.

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