

Technology Transfer in Computing Systems

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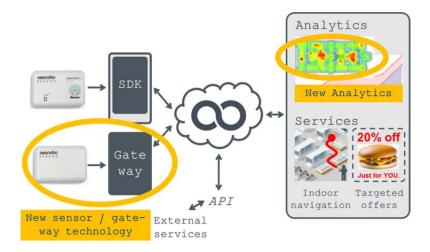


TETRACOM D3.21: Flexible WSN

Flexible, ultra-low-power and easy-to-use Wireless Sensor Network

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Internet of Things (IoT) products will make our life more comfortable and secure and will save the environment energy. To enable such smart services, the context of a person has to be known. Important aspects are: where a person is at a specific moment and what he or she is doing. So-called Beacons can be used to know roughly the position of a human being. They are small Bluetooth Low Energy based devices, which are not connected to the Internet, but sending a signal with a unique ID. This ID can be read by mobile devices (e.g. Smartphones) to help the user to localize himself and to inform him about local-based information (e.g. special offers in a mall or points of interest). Wireless Sensor Nodes on the other side are collecting other information like temperature, movement or heat signatures from the environment. They are connected via gateways to the internet helping to understand the context and status of persons better to offer advanced services.



Combination of Bluetooth Low Energy Beacons with Wireless Sensor Networks

The University of Kaiserslautern has within the Microelectronic Systems Research Group more than 10 years experience in the field of ambient systems and smart environments. Asandoo is working on beacon technology since 2011 and develops embedded hard- and software, mobile SDKs and cloud-based platforms in-house. Asandoo's vision is to link the online and offline world together. Asandoo develops systematically Internet of Things products and offers on their basis smart services. Due to the close cooperation and the established know-how exchange it was possible to bring the world of Bluetooth Low Energy Beacons with the world of Wireless Sensor Networks together. New services and products are now planned to open up new market segments, e.g. for market researches. Also existing products will be improved to enable Asandoo's customers to understand their customers better. Additionally, by the availability of new services Asandoo expects to grow in the number of employers and revenue.