

# Sistema IoT de sensorización, almacenamiento y representación de datos para espacios universitarios

Juan Cantizani<sup>1</sup>, Andrés Pineda<sup>1</sup>, Sergio Fortes<sup>1</sup>, Eduardo Baena<sup>1</sup>, Alberto García<sup>2</sup>

<sup>1</sup>Universidad de Málaga, Andalucía Tech, Departamento de Ingeniería de Comunicaciones,  
Campus de Teatinos s/n, 29071 Málaga, España

{jce, apg, sfr, ebm}@ic.uma.es

<sup>2</sup>Universidad de Málaga, Andalucía Tech, Área Proyectos Arquitectónicos,  
Campus Universitario El Ejido, 29071 Málaga, España  
albertogm@uma.es

## ABSTRACT

In the past years, the concept of Smart City has been a main paradigm for public developments, with the objective of improving the well-being of the citizens, and the performance of public services by means of a detailed monitoring and actions over the different parameters associated to them. Among these monitoring, environmental measurements related with air quality and such are needed. The university campuses, as relevant areas with high concentration of people and infrastructure, as well as centers for education, research and innovation, are perfect areas for the adoption and testing of several projects of this kind. In this way, the present paper presents the ICT design and development of the SmartTree project in which a public infrastructure will be created with capacities such as providing clean energy and gathering environmental data in an integrated way.

## ACKNOWLEDGEMENTS

Este trabajo ha sido realizado dentro de la iniciativa Smart- Campus de la universidad de Málaga, en colaboración con el resto del equipo de desarrollo del proyecto Smart Trees financiado por el I Plan Propio de Smart-Campus de la Universidad de Málaga y por la Universidad de Málaga a través del I Plan Propio de Investigación y Transferencia.