

Report:

**Introduction to Internet of Things (IoT) Workshop**

CASS Outreach Initiative #1462

Requested by: Renato Rimolo-Donadio, on behalf of the Costa Rica CAS Chapter.

The Costa Rica IEEE CAS Chapter organized a five days introductory hands-on workshop “Internet of Things”, which took place from 30<sup>th</sup> of November to 4<sup>th</sup> of December at the Central Campus of the Instituto Tecnológico de Costa Rica (TEC). Assistance to the event was satisfactory: twenty people, including professors, graduate and undergrad students, and people from local industry took the workshop. It was given by Eng. Carla Deras-Ventura, a professional instructor from the company PTC, a USA-based company specialized on CAD/CAM and IoT software.

During the event, the participants immersed on the particularities of Thingworx (an IoT software developed by PTC) and how to integrate it in different applications systems to the Internet, and developed skills for exploiting such integration approach. Several labs on a particular database specially designed as a learning environment for IoT were carried out. The labs included: first steps for configuring IoT, how to manage a database, how to develop user applications, how to establish a link between a thing and Internet, and the implementation of applications in the web to control full systems of interconnected things.

Every day several practical exercises were fulfilled to accomplish the course program, in total 40 hours of training was giving by Eng. Deras-Ventura. Mr. Ronald Bolaños (local representative of PTC) and president of the MecSoft Company in Costa Rica, talked about the future economic and learning opportunities being opened by the rising of Internet of Things, and also mentioned how we can introduce this knowledge to the medical device industry in Costa Rica.

Some pictures of the event are included in the following pages.



Participants of the IoT workshop



Participants and Eng. Carla Deras-Ventura (PTC Instructor)



Mr. Ronald Bolaños (PTC representative in Costa Rica)



Mr. Ronald Bolaños (PTC representative in Costa Rica) and participants