Workshop on Engineering Applications 2015: On the Road to Build a Space for Better Engineers

Applied science is an important part of the human interaction with real world, and applications of different sciences in engineering have become a key aspect of modern life. Engineering applications have different sides to be analyzed including ethics, economical, ecological, relevance, and innovation issues, specially in a world in which human survival is committed to our own capability to make a sustainable, balanced, and better world. While in the 1800’s and before, human beings never had the capability to end the world, in the 1900’s that possibility has been opened and evolved in different ways, all of them related to the role of engineering in applied sciences. The importance of engineering for the future of the world is undisputed, and also our future needs engineering. This way, the Workshop on Engineering Applications (WEA) was born in 2012 as an academic initiative of the IEEE Universidad Distrital Student Branch and the LAMIC (Laboratory for Automation and Computational Intelligence) of the Engineering Faculty of the Universidad Distrital Francisco José de Caldas intended to be a space for discussing recent advances in engineering applications of different theories and sciences.

In 2015, WEA re-opened the doors to different engineering and science topics including statistics, geosciences, operations research, uncertainty analysis, DSP, computational intelligence, IoT, etc., in a successful space organized by the IEEE Universidad Distrital Student Branch, the IIE Universidad Distrital Student Chapter, the Ph.D. Program on Engineering, and the Grupo Semana of the Engineering Faculty of the Universidad Distrital.

On behalf of the Program and the Organizing Committees of the 2015 Workshop on Engineering Applications - International Congress on Engineering (WEA 2015), it is our pleasure to thank all attendants and authors for coming to our congress held in Bogotá – Colombia in Oct. 28-30, 2015. In this edition, we have accepted more than 30 papers from different countries in different topics of engineering applications organized in twelve sessions, three tutorials, a panel discussion, and six remarkable plenary speakers.

As a result of a selection process of the best papers done by our PC members, based on their quality, technical contents and performance of its presentation in the congress, we present the best results of WEA 2015 materialized in this special section of the Revista Ingeniería of the Universidad Distrital Francisco José de Caldas. We hope to keep on the road of offering WEA to the academic community... See you in WEA 2016, enjoy!

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