PROLOGUE

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In this special issue of 3C Tecnología, we are publishing only 11 papers of the *6th International Conference on Green Computing and Engineering Technologies*, which was held on 16-18 September 2020 in Herzen State Pedagogical University of Russia, St Petersburg, Russia. Although, we have received 374 papers and 72 papers are accepted and published in conference proceedings. Due to the high-quality standards of our guest editorial board of 3C Tecnología, we shortlisted only 11 papers out of 72 and invited extended versions from the author and we are publishing the following 11 papers in the October Special Issue of 3C Tecnología.

In the first paper, Ivanov *et al.* (2020), considers an approach to visualization of human body structure using augmented reality. This approach will be a boon for doctors. This research is going to revolutionize the process of surgery in the healthcare industry. This paper discusses a project to develop a technology for using augmented reality in planning and performing surgery. The capabilities of the technology, as well as the prospects for its use, are highlighted.

In the second paper, Alfaro *et al.* (2020), are establishing the degree to which influence exerted by technology called Balanced Scorecard (BSC) as a support to the software development. This research also deals with the standardization of CMMI appraisal method,

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Systemic Approach to conceive the problem comprehensively, and level of maturity of the software process. There is a 26.4% improvement in performance obtained by this research methodology.

In the third paper, Shah and Alandjani (2020), highlights the major dependency of the USA on Fossil Fuels and Nuclear power. This research deals with another approach to the global clean energy crisis. This approach said instead of finding new energy sources, we should become energy efficient. Road power generation is a new technology where the wasted energy of a moving vehicle can be extracted and converted to useful work done. This paper presents such a technology which when employed at the corner of a road can send power directly to the grid or run streetlights depending on the mode of operation.

In the fourth paper, Shah and Alsibiani (2020) highlighted the ongoing research in renewable energy sources in this century. It is often said that wind energy is an unreliable source of energy. But, Shah and Alsibiani (2020) insist that it is not unreasonable if placed at places where wind currents are smooth. Savonius rotor as Vertical Axis Wind Turbine (VAWT) is used as a standalone power generation device because of its low cost, low cut-in speed and the fact that it can accept wind from any direction. According to the study conducted, the voltage output recorded at 5.4 m/s wind speed was 19.1 Volts.

In the fifth paper, Khan *et al.* (2020) investigated one of the emerging areas of research called Augmented Reality (AR). In this research, they successfully deployed an IOS application which can detect live gestures of our hand movements and then creating 3D models with the help of their hand gestures.

In the sixth paper, Hussain *et al.* (2020) have proposed the multiple fault detection and identification system for three-phase induction motors using current signature analysis method (CSAM). The simulated system in MATLAB/SIMULINK and simulation is performed based on the healthy and unhealthy conditions of the motor. Comparative analysis between FFT and STFT, shows STFT as a promising approach.

In the seventh paper, Narejo, Talpur, Memon, and Rahoo (2020) applied CNN (Convolutional Neural Network) for traffic sign recognition especially for railway drivers. This paper explores the system to help the driver recognize road signs to avoid road accidents. In this

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paper, they implement the traffic sign recognition by using CNN, the CNN is trained by using the dataset of 43 different classes of traffic signs along with TensorFlow library. They are getting results with 95% accuracy.

In the eighth paper, Paredes *et al.* (2020) investigate the acceptability of chrysin with the partial replacement of pituca flour based on intake of protein. They used quasi-experimental design and food ingredients mainly wheat flour, pituca flour, margarine, white sugar and yeast in their research. MINITAB and SPSS programs used by researchers for evaluation of data and samples taken.

In the ninth paper, Nakayo *et al.* (2020) investigate to demonstrate the yiled of the flour of tocosh of two varieties of potato (solanum tuberosum) canchán and native variety of "calamarca. The raw material was acquired in the district of Paucartambo province of Pasco department of Pasco, to 2880 msnm, for the experimental study the two varieties of potatoes were placed using as technique a pool with a water current with varied times, where the microorganisms act and increase their activity related to the acidity.

In the tenth paper, Gutiérrez *et al.* (2020) discusses a great influence on the physical security of the urban infrastructure and the citizens of our capital city, that is why it is necessary to apply prevention strategies since our city is located in a very vulnerable area to seismic events, mainly huaycos, floods and landslides, settlements, landslides and other superficial mass movements, so it is necessary to have knowledge of the causes and effects of these phenomena, the different types and carrying capacity of soils in the districts of Metropolitan Lima, in order to contribute to the knowledge of the degree of vulnerability in which urban areas, marginal urban areas, human settlements are exposed.

In the eleventh paper, Rojas *et al.* (2020) identify new mechanisms that serve as tools for the mitigation of plastic contamination through the biodegradation of low density polyethylene using microorganisms of the species Pseudomona aeruginosa (bacteria) and Aspergillus brazilensis (fungus) under controlled thermal conditions in an airlift bioreactor. The methods used were 2 samples of LDPE with concentrations of 50 mg/L and 2 samples of 100 mg/L deposited in an airlift bioreactor under controlled thermal conditions with a duration of 7 days.

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