KeyNotes

EDUTAINMENT - 2019

The 13th international conference on e-learning and games

Dates: August 15-17 2019
Dr. César A. Collazos

Full Professor Universidad del Cauca (Colombia), Phd in Computer Science (Universidad de Chile). Postdoctoral staying in Spain and Chile working in aspects related with Human-Computer Interaction and Computer Supported Cooperative Work. Visiting profesor of different Iberoamerican universities in Chile, Spain, Peru, Mexico, Argentina.

Keynote invited of different workshops like:

- V Campus Virtuales, Panamá, Oct. 2014
- 11º CISSIT, Trujillo, Perú, Nov. 2014.
- 6th Colombian Computer Science Congress, Collaborative Systems, ManizalesColombia, 2011.

His main research areas include HCI, CSCL, CSCW, Gamification, ICT in Education.
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COLLABORATIVE GAMES AS A MECHANISM SUPPORTING MONITORING AND EVALUATION OF COLLABORATIVE LEARNING PROCESSES

Abstract:

Collaborative learning is one of the most remarkable and fertile areas of theory, research, and practice in education. The use of collaborative learning so pervades education that it is difficult to find textbooks on instructional methods, teachers' journals, or instructional materials that do not mention and utilize it. However, just putting a group of students around a task does not guarantee a real collaboration. It is necessary to structure activities convey participation, communication and collaboration. In this talk I will present a method using collaborative games in order to analyze the quality of the collaboration process for small groups working synchronously proposing a mechanism to monitor this process and a way to improve it considering that it is not only important collaborating to learn but learning to collaborate.
Dr. Mario Diván

Full professor and head of the Data Science Research Group at National University of La Pampa (Argentina). He is Honorary Professor of the Amity Institute of Information Technology (Noida, India) from 2016. He holds a System Analyst (2002), Information System Engineer (2002), Specialist in Managerial Engineering (2004) and MBA (2006) from National Technological University (Córdoba, Argentina). He is a specialist in Data Mining and Knowledge Discovery in Databases from the University of Buenos Aires in 2007. Dr. Diván is a specialist in High Performance and Grid Computing from the University of La Plata in 2011. He received the degree of Ph.D. in Computer Science from the University of La Plata in 2011. Costa Rica, Panamá, Brazil.

His scientific interests lie in the area of data mining, data stream, stream mining, high-performance computing, big data, measurement, and evaluation. Dr. Diván integrates the academic committee for the Master and the Ph.D. in Computer Science at the National Technological University (Córdoba, Argentina) from 2012 and 2016 respectively. He is Director at the Professional Council of Engineers and Technicians of La Pampa (Argentina). In 2012 and 2015, he has been recognized by the Argentinian Computing Society with the National Award of Electronic Government. In 2016, 2017 and 2018 he received the Best Paper Award in Data Analytics Track in the International Conference on Reliability, Infocom Technologies, and Optimization (ICRITO). In the private sector, he has worked from 2002 as a consultant in the decision support systems for different industries such as the pharmaceutical, government, alimentary, beverages, construction, oil, among others.
TOWARDS A STRATIFIED MULTI-CRITERIA DECISION-MAKING IN THE REAL-TIME DATA PROCESSING

Abstract:

The real-time data processing jointly with the decision making is permanently demanded in the current economy. The Measurement and Evaluation (M&E) process represent a key asset for knowing the environment from a quantitative viewpoint. A measurement process must warranty its repeatability, consistency, and the comparability of its results. The interpretation of each result through the indicators represents a critical aspect in relation to the decision-making process. The RealTime Data Processing Architecture based on Measurement Metadata uses a framework for automatizing the M&E process. An extension of this M&E framework is proposed for supporting the Stratified Multi-Criteria Decision-Making Method jointly with the updating of the architecture for supporting the indicator interpretation in different scenarios. Further, a frequency analysis of each scenario is defined for giving feedback to the domain experts. Now, the indicators can be interpreted in real-time on each scenario jointly with the associated risks previously to make a decision.
Dr. José Tiberio Hernández

PhD in Applied Informatics, ENSTA (Paris, France). Master in Systems and computer engineering, Universidad de los Andes masters of Science (DEA) Informatique appliqué. Paris VI (France) systems and computer engineer, Universidad de los Andes.

Head of the Visual computing Area (IMAGINE Group), he has served as Dean of the Faculty of Engineering at the Universidad de Los Andes and a full-time professor at the Universidad de los Andes.

IMAGINE RESEARCH GROUP. MORE THAN 20 YEARS SUPPORTING EDUTAINMENT IN COLOMBIA
CHALLENGES AND OPPORTUNITIES IN DEVELOPING AR/VR SYSTEMS FOR CO-CURRICULAR EDUTAINMENT

Abstract:

Lots of learning happens in the classroom and even more happens outside the confines of the four walls of the classroom. Edutainment forms the key in attracting and engaging the old and young alike. This keynote will address the recent developments and state-of-the art technologies in Edutainment systems. Several examples are presented from fields including arts, archaeology, science, medicine, technology and tourism.

Professor Edmond C. Prakash

Professor Edmond C. Prakash, PhD in High Performance Computing and Scientific Visualization. Edmond is currently Professor in Computer Science and Associate Dean for Research at Cardiff Metropolitan University, United Kingdom. He has held positions and research collaborations in India, Singapore, China, Colombia, UK and USA. Research Interest Games Technology, Big Data Visualization, Human Computer Animation, High Performance Computing, Interactive Digital Media, AR/VR
Xun Luo, IEEE Senior member and Professor at Tianjin University of Technology (China), who is an expert in the creation of virtual environments.

TITLE: Reality Meets Virtual: Procedural Virtual Content Generation at City Scale
Dr. Sergio Albiol-Pérez

Assistant Professor at the Department of Computer Science and Systems Engineering, Universidad de Zaragoza in Teruel, Spain. He is the Main Researcher of the “Health Multimodal” Consortium of Campus Iberus (Spain) and also the Main Researcher of the team “Sistemas tecnológicos en el Campo de la Salud” at the Instituto de Investigación Sanitaria Aragón (Spain). He received the Computer Science Degree at the Universidad Politécnica of Valencia in 1999.

In 2010, he completed the Diploma of Advanced Studies (DEA) at the Universitat Politècnica de Valencia. In 2014, he defended his PhD thesis with Cum Laude at the Universitat Politècnica de Valencia, Spain. He has been teaching since 2001 at the Computer Science and Systems Engineering Department, Universidad de Zaragoza. He has organized workshop sessions regarding Virtual Rehabilitation Theories and Applications. He has coauthored more than 40 papers (articles, conference papers, and chapter books). His research interests focus on patients with serious injuries and illnesses by using Virtual Rehabilitation techniques, in the area of Virtual Motor Rehabilitation, and Systems based on Interaction for the recovery of Mental Disorders. His research lines are: Multimodal Systems in patients with neurological disorders, Gross and Fine Rehabilitation in patients with sensorimotor disorders, Virtual Rehabilitation: Fall prevention in old people, and Cognitive Rehabilitation.
TITLE: VIRTUAL REHABILITATION IN PATIENTS WITH NEUROLOGICAL DISORDERS: PAST, PRESENT, AND FUTURE

Abstract:

This talk will present prototypes based on Virtual and Augmented Reality tested in patients with neurological diseases in the last few years. A lot of studies have demonstrated that the uses of these groundbreaking technological systems are a good complement in the rehabilitation processes with clear improvements in motor and cognitive disorders. Thanks to this, quality of life is improved in multiples pathologies: Acquired Brain Injury, Multiple sclerosis, Guillain–Barre, Cerebral Palsy, etc. In the last few years, the use of this technology together with traditional rehabilitation is a fact in neurorehabilitation services, association for the care of disabled people, etc. For this reason, in this talk will outline multiples studies tested to alleviate motor and cognitive disorders. Finally, it will present future research directions.
Luis Astorquiza

Systems and Computing Engineer - Pontificia Universidad Javeriana Cali, PhD Candidate in Design and Creation - Universidad of Caldas, Director of the DaVinci Program for Transdisciplinary Research and Development in Digital Creation - Pontificia Universidad Javeriana Cali.

Guest digital artist for Edutainment 2019

His interactive digital works developed in the context of citizen innovation laboratories for America, Asia and Europe will be exhibited.

He has exhibited his works in Colombia, Mexico, Argentina, Brazil, Spain, South Korea

Invited by ACC - Asia Culture Center of South Korea, Medialab Prado - Spain, Technological Institute of Monterey - Mexico, University of Sao Paulo and University of Vitoria - Brazil, Tres de Febrero University - Argentina, among others.

Leads the global initiative ACADEMIALAB

Promulgated in Medialab Prado, and that seeks to bring the academic world closer to the digital experimentation spaces in Labs.
big banner said “Don’t worry about us stealing your idea. We are already working on something better!” The space had municipal government support and it was free to use. They had a manifesto that focused on helping each other through the challenging journey of entrepreneurship. Just like when penguins are facing the harshness of a life or death climate, entrepreneurs need to huddle together! When I came back to North Vancouver I started asking around to see if there was anything like this locally and when it turned out there wasn’t, along with a co-founder, the Zen Launchpad innovation hub was born.

As far as I can remember I have been drawn to entrepreneurship. While I was doing an undergraduate science degree at the University of Guelph, I got my first taste of a starting a new “serious” business, a leading environmental news scanning business run out of my dorm room and then later doing an MBA from UBC with a focus on technology entrepreneurship. A course at UBC with the legendary Haig Farris where business students were matched up with engineers was inspirational and sent me down the pathway of appreciating the benefits of cross-disciplinary teams and what it takes to start and grow a venture. From that one course came billions of dollars in local start-up valuations. Haig would show us the ropes and bring in guest speakers from industry each week with insights beyond any textbook. I was hooked.
Then came the “.com” days and after working in senior roles with starting new Internet business units at the Yellow Pages and futureshop.ca, and then a fast growing B2B e-marketplace called TrainingNet, I decided to take the plunge and start an e-learning company called Zoom E-Learning Networks (ZEN). That turned out to be just when the bubble burst and as they joked “B2C” now stood for “Back to Cleveland,” returning from Silicon Valley, putting back on the suit and tie, and begging your former boss for your old stable job back. In my case “Back to Cleveland” coincided with three young kids and meant heading for safer harbour and becoming an instructor at Capilano University and BCIT, helping to teach the next generation of entrepreneurs. The main lesson learned was that teaching entrepreneurship is a lot easier than doing entrepreneurship and I have deep respect for anyone that is crazy enough to take the plunge and “relentlessly pursue opportunity without regards to resources currently held” as the Harvard Business School’s Howard Stephenson so eloquently described the “building a company” sprint/marathon. It has been rewarding to see many student venture teams from classes I have taught morph into serious tech ventures. Over the years I have developed a sense of spotting early stars before they hit the local seed investment venues around town.

Concurrently I got “back in the game” and founded Zen Maker Lab, delivering maker tech education and then later co-founded Zen Digital, a digital marketing agency focused on helping innovative companies grow. My role in the Zen Innovation Fund team is the “starter”, helping to establish and nurture the local innovation hub, the deal pipeline and watching out for emerging talent and helping portfolio companies with marketing and information technology
Fernando Alonso Gómez Carrillo

Systems Engineer from the Universidad Piloto de Colombia, Master in Direction and Management of Educational Institutions from the Universidad de la Sabana and Java Programmer certified by Sun Microsystems, with more than 19 years of experience.

Technology Director for 11 years in the Tourism Sector (Carlson Wagonlit Travel) where he developed specialized software for the management and operation of this type of companies (ERP). Lecturer and author of articles on topics related to E-Learning and Virtual Worlds applied to Educational environments.

Currently Dean of System Engineering program in Universidad Piloto de Colombia
TITLE: INTRODUCTION AND JUSTIFICATION TO THE IMMERSIVE VIRTUAL LEARNING ENVIRONMENTS SUPPORTED BY THE MINECRAFTEDU PLATFORM IN THE PILOTO UNIVERSITY OF COLOMBIA.

Abstract:

The current document presents in a contextualized manner the use of digital games in learning environments and the difficulties that many educational institutions have faced when trying to adapt these kind of tools. A new concept for learning environments is presented, a concept that emerged with the Minecraft Platform: the Voxel classroom and its application as immersive learning environment. The document justifies the use of these tools in the Piloto University in Colombia, emphasizing their open structure and advantages as the "Game of life" or "Virtual lego" and pointing its flexibility and adaptability for different kind of subjects or courses. The use of Minecraft in many real world architectural projects is illustrated: "Block by Block" by United Nations and the course "Design I" belonging to the Building Architecture program of Piloto University. At the end, an inventory of basic game resources is presented in addition to a general evaluation of partial results.