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Jiří Strouhal



Economics & Education

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- 🔑 **Proceedings of the 12th International Conference on Educational Technologies (EDUTE '16)**
- 🔑 **Proceedings of the 10th International Conference on Business Administration (ICBA '16)**

Barcelona, Spain, February 13-15, 2016



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Preface

This year the 12th International Conference on Educational Technologies (EDUTE '16) and the 10th International Conference on Business Administration (ICBA '16) were held in Barcelona, Spain, February 13-15, 2016. The conferences provided a platform to discuss advanced educational software and hardware, corporate training, curriculum design and development, digital libraries and education, education for business and industry, applied management science, business and emerging markets, business information systems, global business advancement etc. with participants from all over the world, both from academia and from industry.

Their success is reflected in the papers received, with participants coming from several countries, allowing a real multinational multicultural exchange of experiences and ideas.

The accepted papers of these conferences are published in this Book that will be sent to international indexes. They will be also available in the E-Library of the WSEAS. Extended versions of the best papers will be promoted to many Journals for further evaluation.

Conferences such as these can only succeed as a team effort, so the Editors want to thank the International Scientific Committee and the Reviewers for their excellent work in reviewing the papers as well as their invaluable input and advice.

The Editors

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Plenary Lecture 1

Enactive Interactions and Embodied Knowledge Acquisition in Natural and Virtual Environments: Implications for Cognitive Neuroscience



Professor Francesca Morganti

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Abstract: Within the most recent cognitive neuroscience approach, enaction considers human interaction as situated in a specific context. The sensorimotor coupling of biological organisms and the environment in which they live determines recurrent patterns of perception and action that shapes cognition. At the same time embodied knowledge refers to the idea of a body as the interface between the brain and the world that allows the mind and the specific surrounding environment to merge in order to acquire knowledge. By reshaping the concept of perception, action and learning the enactive approach sheds new light on the implications that mirror neurons discoveries had for neuroscience in the last twenty years. On the other side, enactive embodied cognition introduces the notion of the coevolution of the agent and its environment opening several unrevealed questions about the equivalence between natural and simulated environments largely used in cognitive research and clinical applications. The present contribution aims in detail those questions and in finding possible answers by presenting some example of knowledge acquisition assessment and treatment through the use of virtual simulation in cognitive neuroscience.

Brief Biography of the Speaker: Francesca Morganti worked since 1999 on the relationship between enactive technologies, such as virtual reality, and cognitive science. From one point of view she used enactive technologies as innovative possibility to have a full controlled experimental setting for the study of knowledge acquisition, on the other complementary side she designed and ergonomically tested enactive technologies for the application in experimental psychology and neuroscience. Among the Italian scientific panorama Francesca Morganti has a peculiar expertise in between Neuroscience and Information Technology as showed from her publication record and from the international scholar activity on <http://loop.frontiersin.org/people/167593/overview>

On emerging technologies application in neuroscience, Francesca Morganti worked as Senior Researcher in European Union and Italian research programs on the evaluation and treatment of cognitive impairment derived from brain injury, focussing in particular on cardiovascular brain diseases (stroke) and neurodegenerative dementia (Alzheimer's). Within this field Francesca Morganti published several international papers and received important awards both from the clinical and from the technological scientific community. At present she is Research Professor at the University of Bergamo (Italy) in the field of clinical and developmental neuropsychology.

Plenary Lecture 2

Contributions to the Experimental Study Regarding the Influence of the Cutting Fluid on the Grinding Process Performances



Professor Constantin Buzatu

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Abstract: In the paper is shown a theoretical study regarding the manner in which the cutting fluid influences the performances of the grinding process. The quantity of heat that results during grinding process is transmitted to the technological elements which influence the thermal deformations of the workpieces and their dimensional accuracy and surface finish. Also, are distinguished experimental data regarding the influence of cutting speed on the temperature in machining zone in the case of different cutting processes.

Brief Biography of the Speaker: Constantin Buzatu is Professor at the Faculty of Technological Engineering and Manufacturing Technology Department of Transilvania University of Brasov, Romania. He graduated in 1972 and he obtained his Ph.D. in the field of accuracy of machining processes. His research interests are in Manufacturing engineering processes, Automation in industry, Performance measurement and management, Education technology. He is author and co-author of seven books and more than 150 papers in national and international conferences. Also he has been research manager for several research grants from Ministry of Education of Romania, and for contracts with factories in industry to introduce new technologies in producing workpieces and to improve their reliability. He was member of technical program committee of some conferences and chairman of local and international conferences. He has been scientific reviewer for International Conferences and independent evaluator for Grant National Competitions.

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