



Workshop on Industry Applications (WIA) – Schedule

Oral Presentation Session

Friday (Oct, 7)

14:00 – 15:45

WIA.OP.1 - Organizing Images from Social Media to Monitor Real-World Events
Paulo Cavalin (IBM Research), Flavio Figueiredo (IBM Research), Máira de Bayser (IBM Research), Claudio Pinhanez (IBM Research)

WIA.OP.2 - Detecção Automática de Microcomponentes SMT Ausentes em Placas de Circuito Impresso
Cleandro Rocha (UFAM), Mathias Menezes (UFAM), Felipe Oliveira (UFAM)

WIA.OP.3 - Using Color for Fish Species Classification
Uéliton Freitas (UFMS), Wesley Gonçalves (UFMS), Edson Matsubara (UFMS), José Sabino (UNIDERP), Marcelo Borth (IFPR), Hemerson Pistori (UCDB)

WIA.OP.4 - Classification of Life Events on Social Media
Paulo Cavalin (IBM Research), Fillipe Dornelas (IBM Research), Sergio da Cruz (UFRRJ)

WIA.OP.5 - Search and Automatic Summarization of Relevant Features in Forensic Scenarios
Erick Cabral de Lima Borges (VSoft Tecnologia), Igor Lucena Peixoto Andrezza (VSoft Tecnologia), Rajiv Albino Torreão Mota (VSoft Tecnologia), Leonardo Batista (UFPB)

Invited Talk Session

Friday (Oct, 7)

16:15 – 18:00

WIA.IT.1 - **An Overview of IBM Research - Brazil and the Social Data Analytics group**
Paulo Cavalin (IBM Research, Brazil)

Abstract: The main purpose of this talk is to present to the audience an overview about how IBM research works and the kinds of projects we have been involved in, and share my experience regarding the prospects of a research carrer in the company. Consequently, I will first present an overview of IBM Research and the global labs. With an special focus on Brazil Research Lab (BRL), I will present the organisation and the research areas of this lab specifically. Next, I will present my research group, the Social Data Analytics group, in greater detail, which includes the descriptions of some projects which I have collaborated, some technical details about them, and the main challenges and lessons learned.

Biography: Paulo Cavalin is currently a Research Scientist in the Social Data Analytics Group, at IBM Research - Brazil, conducting both theoretical and applied research in Pattern Recognition, Machine Learning, and Computer Vision. He received a Ph.D. degree in Automated Production Engineering/Computer Science at Ecole de Technologie Superieure (ETS) - Universite du Quebec, Montreal (QC) - Canada, in 2011, a M.Sc. degree in Applied Informatics at Pontificia Universidade Catolica do Parana (PUCPR), Curitiba (PR) - Brazil, in 2005, and a B.Sc. degree in Informatics at Universidade Estadual de Ponta Grossa (UEPG), Ponta Grossa (PR) - Brazil, in 2002. Prior to joining IBM, he was a Professor at Universidade Federal do Tocantins (UFT), Palmas (TO) - Brazil. Among other activities, he has previously actuated as a Research and Teaching Assistant at ETS; and as Visiting Researcher at Centre for Pattern Analysis and Machine Intelligence (CENPARMI) - Concordia University, Montreal (QC) – Canada.

WIA.IT.2 - Challenges in Real-Time Event Detection in Video

Leonardo Nunes (Microsoft's Advanced Technoogy Labs, Brazil)

Abstract: In this talk the problem of detecting events in real-time in video will be discussed, with special focus for video obtained using COTS surveillance cameras. In particular, the main challenges encountered in analyzing real-world videos, in real-time, and for long periods of time will be discussed, both from a machine learning and a system design point of view. Solutions investigated by Microsoft's Advanced Technology Lab in Brazil will be briefly presented and future research lines will be described.

Biography: Leonardo Nunes is the lead researcher of Microsoft's Advanced Technology Labs in Brazil where he investigates algorithms for real-time video understanding and event detection. He received his B.Sc. degree in electronics and computer engineering and his M.Sc. and D.Sc. degrees in electrical engineering, from the Federal University of Rio de Janeiro (UFRJ). Dr. Nunes research focus in signal processing and machine learning, with special focus in audio and video signals, and computationally efficient methods. Prior to working to Microsoft, he was a substitute professor at the Federal University of Rio de Janeiro and a principal scientist with Halliburton's Applied Photonics Center. He received a top 10% award from the IEEE Workshop on Multimedia Signal Processing in 2009. Dr. Nunes is an IEEE member.