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Background: The past two decades have witness an upsurge in the scientific interest to harness the benefits of the event-based paradigm applied to a wide spectrum of engineering disciplines including control, communication, signal processing, and electronic instrumentation. The event-based systems, in which the system activities are triggered by events instead of progression of time, exhibit certain advantages over other approaches, such as time-triggered, for instance, in the resource-constrained applications. Specific application areas include energy-efficient control over wireless networks, energy-efficient clockless circuits and signal processing chains, bio-inspired computing architectures, or frame-free event-driven vision systems, to mention a few.

Aim: The aim of the EBC CSP 2016 conference is to bring together researchers and practitioners from the industry and academia and provide them with a platform to report on recent advances and developments in the event-based systems and architectures applied in wide spectrum of engineering disciplines including control, communication, computing, and signal processing.

Topics include, but are not limited to:

Event-based control & systems: Event-based and self-triggered control, Continuous and periodic event-triggered control, State-feedback and output-based event-triggered control, Event-based PI and PID controllers, Event-based control over networks, Decentralized event-triggered control, Distributed event-triggered control, Distributed event-triggered control for multi-agent systems, Event-based state estimation, Control systems with Lebesgue sampling, Lyapunov sampling for event-driven controllers, Event-based intermittent control, Generalized predictive event-triggered control, Discrete-event systems

Event-based communication, computing & systems: Event-based and time-triggered communication architectures, Event-based protocols, Flexible time-triggered protocols and architectures, Event-based fieldbuses, Event-based real-time systems Controller Area Networks (CAN), Complex events detection, Event-based wireless sensor and control systems, Event-triggered and self-triggered real-time task scheduling, Performance evaluation of event-based communication systems, Event-based and adaptive sampling, Cost-aware sampling, Adaptive sampling and sleep mode, Intelligent sampling, Design of event-based sampling criteria, Event-based spatial and spatio-temporal sampling, Intelligent event-driven sensors, Send-on-delta data reporting strategy, Event-based communication systems modelling and design, Event-based control applications Programming Languages, Software Engineering, Security & Privacy, Big Data & Data Management, Intelligent Systems, Distributed & Parallel Computing, Cloud Computing

Event-based signal processing & systems: Event-driven signal processing chain, Event-driven signal processing theory, Event-driven data acquisition, Event-driven analog-to-digital conversion techniques, Adaptive-rate analog-to-digital conversion, Level-crossing analog-to-digital converters, Event-driven filters, Event-driven adaptive filters, Clockless and self-timed circuits and architectures, Spectral analysis of event-triggered sampled data, Asynchronous Delta modulation, Asynchronous Delta modulator implementations, Event-based signal reconstruction methods, Event-based signal processing applications, Intelligent event-driven sensors, Continuous-time digital signal processing, Event-driven computing, Biologically-inspired event-driven systems, Spike-event generation, Event-driven visual attention, Event-driven vision sensing, Dynamic Vision Sensor (DVS) systems, Frame-free event-driven vision systems, Address-Event Representation (AER) protocol and interface, Event-driven convolution processors, Event-driven stereo vision

Discrete Event Systems: Formalisms and modeling methodologies: Petri nets, automata, statecharts, process algebras, max-plus algebra, queuing networks Control of discrete-event systems: supervisory control; real time control Performance evaluation, optimization, scheduling Diagnosis, fault detection, test, identification Hybrid systems Applications: manufacturing systems, communication protocols and systems, transportationsystems, office and home automation, urban automation, smart grid, large-scale distributed systems, healthcaresystems, software engineering Electronic Design Automation of software tools to support operation of large-scale distributed systemssuch as manufacturing systems, building automation, highway automation, urban automation Computer tools for DES modelling, synthesis, analysis

Submission of Papers: Manuscripts must be submitted electronically in PDF format, according to the instructions contained in the conference web site. Contributions must contain original unpublished work. Papers that have been concurrently submitted to other conferences or journals (double submissions) will be automatically rejected. Papers are to be submitted electronically in PDF format. Two types of submissions are solicited: Long Papers - 8 double-column pages. Work-in-Progress Papers - limited to 4 double-column pages. For further details, please consult the conference web pages.

Paper Acceptance: Each accepted paper must be presented at the conference by one of the authors. The final manuscript must be accompanied by a registration form and a registration fee payment proof. All conference attendees, including authors and session chairpersons, must pay the conference registration fee, and their travel expenses.

Author's Schedule

Regular & Special Session Papers:

Submission deadline: March 20, 2016
Notification for acceptance: April 10, 2016
Deadline for final manuscript: May 1, 2016

WiP papers:

Submission deadline: April 15, 2016
Notification for acceptance: April 29, 2016
Deadline for final manuscript: May 9, 2016

FURTHER INFORMATION: <http://ebccsp2016.org>

Krakow is one of the most attractive cities in Europe. Featuring a medieval old town with the largest town square in Europe. Krakow is also the cultural center of the Eastern Europe. Bach, Corelli, Penderecki, and Vivaldi are performed every day in magnificent sacral environments. Art galleries and exhibitions of modern art are in abundance. The Krakow's town square restaurants are buzzing with life till early morning hours. The conference will be held at the **AGH University of Science and Technology (AGH-UST)**, which is one of the oldest and biggest Polish technical universities with 90 years in existence. The university has 15 faculties and 9 Multidisciplinary Research Centers, 33 fields of study, more than 170 specializations, 35,000 students, 500 doctoral students, and over 2,000 researchers including over 600 associate and full professors.

