

ESTIMedia 2016

The 14th IEEE Symposium on Embedded Systems For Real-time Multimedia

Pittsburgh, USA



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Call for Papers

ESTIMedia 2016

The 14th IEEE Symposium on Embedded Systems for Real-Time Multimedia

October 6 – 7 2016, Pittsburgh, USA

The IEEE ESTIMedia'16 is organized as a part of the Embedded Systems Week 2016 (October 2 – 7, 2016)

<http://www.estimedia.org/>

New Themes: - Camera-based Processing for IoT, CPS, Healthcare, and Medical Imaging; - Security for Media Processing; - Application of Emerging Computing Paradigms (like Approximate and Neuromorphic Computing) to Media Processing.

General Chair

Hyunok Oh, *Hanyang University, Korea*

Technical Program Co-Chairs

Muhammad Shafique, *KIT, Germany*

Sander Stuijk, *TUE, The Netherlands*

Web Chair

Santiago Pagani, *KIT, Germany*

Publication Chair

Youngmin Yi, *University of Seoul, Korea*

Important Dates

<i>Title and Abstract Deadline</i>	June 27, 2016
<i>Full Paper Submission Deadline</i>	July 04, 2016
<i>Author Notification</i>	August 01, 2016
<i>Camera-Ready Version due</i>	September 01, 2016
<i>ESTIMedia</i>	October 6 - 7, 2016
<i>Submission Site</i>	https://www.softconf.com/g/ESTIMedia2016/

Multimedia and camera-based technologies play an important role in our daily life, and have become among the most relevant technological innovations. These technologies have proliferated into a wide range of application domains like Internet-of-Things (IoT), Cyber-Physical Systems (CPS), Healthcare and Medical Image Processing, Security, Consumer Electronics, etc. The evermore increasing computational and communication requirements demanded by current and next generation multimedia and image/video processing devices together with energy constraints which characterize portable devices require innovative design methodologies and tools. The IEEE ESTIMedia aims to bring together people from different multimedia and imaging-related research communities who have worked separately but did not interact sufficiently to address the challenges facing the design of hardware and software layers of such highly specialized multimedia and image/video processing systems.

The 14th edition of ESTIMedia is continuing to be run in the Embedded System Week and will provide a forum for researchers, from academia and industry, to present and discuss innovative ideas and solutions related to embedded systems for real-time multimedia and image/video processing. *This year, a special focus will be on emerging computing paradigms (like approximate and neuromorphic computing), and emerging application areas (like IoT, CPS, and Healthcare with camera-based processing).*

The accepted papers will be published in the symposium electronic proceedings and included in the IEEE Digital Library.

Areas of Interest (but not restricted to)

- Emerging trends for embedded multimedia systems (approximate computing, neuromorphic computing, embedded/mobile gaming, etc.)
- Application of camera-based processing in IoT, CPS, and Healthcare
- Real-time medical imaging
- Security and protection of media processing and streams
- Circuits and architectures for embedded multimedia and image/video processing systems
- Multimedia processors, reconfigurable architectures, many-core systems, and networks-on-chip
- Specification, modeling, design methodologies, and case studies
- Validation and verification of embedded multimedia and image/video processing systems
- Software optimization and compiler techniques
- Timing aspects of media streams
- Scheduling and analysis of media processing
- Resource and QoS management methods
- Real-time kernels, OS and middleware support

Submission Guidelines

Both research and application-oriented papers are welcome. **Research papers** should describe original research, such as new ideas, promising approaches and experiences with practical systems. **Application-oriented papers** should describe interesting technical aspects of real-life applications, industrial experiences, prototypes, and standards. Submitted papers should represent original work, not published or submitted for publication in other conferences or journals. Please, see the Paper Submission Guidelines section on the symposium webpage.

Any questions regarding the submission process may be directed to the TPC Co-Chairs *Muhammad Shafique* (muhammad.shafique@kit.edu) or *Sander Stuijk* (s.stuijk@tue.nl).