HFIV'17

Human Factors in Intelligent Vehicles
Workshop Series at IEEE IV Conferences

Apologies for multiple postings of this announcement!
Please, forward this CFP to potentially interested people. Thanks!

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6th WORKSHOP ON HUMAN FACTORS IN INTELLIGENT VEHICLES
(http://hfiv.net)

Monday October 16 2017, Yokohama, JAPAN

To be held at the **IEEE 20th International Conference on
Intelligent Transportation Systems**
October 16 - 19, 2017 Yokohama, JAPAN (http://www.itsc2017.org/)

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SUBMISSION DEADLINE: Jun 30th, 2017

AIM AND SCOPE

The IEEE Workshop on Human Factors in Intelligent Vehicles (HFIV'17) allocated with the IEEE 20th International Conference on Intelligent Transportation Systems, to be held in Yokohama, JAPAN, October 16 - 19, 2017 is the 6th edition of its series.

The HFIV'17 welcomes and encourages contributions reporting on original research, work under development and experiments of different fields related to Human Factors.

The IEEE Workshop series on Human Factors in Intelligent Vehicles aims to foster discussion on issues related to the analysis of human factors in the design and evaluation of intelligent vehicles technologies, in a wide spectrum of applications and in different dimensions. It is expected to build upon a proper environment to disseminate knowledge and motivate interactions among the technical and scientific communities,

practitioners and students, allowing state-of-the-art concepts and advances to be further developed and enhanced.

IV technologies have experienced a great improvement in the last couple of decades, turning vehicles into more interactive counterparts in transportation and mobility systems. However, analyzing the impact of such technologies on traffic awareness for the drivers and their behavior towards improving driving performance while reducing road accidents as well as psycho and physical exhaustion still demands proper tools and approaches.

Whereas the feasibility of incorporating new technology-driven functionalities to vehicles has played a central role in the automotive design, not always safety issues related to interaction with the new in-vehicle systems have been taken into consideration. Additionally, other aspects are equally important and need to be accounted for, such as the impact technologies that support specific driving functions play on the primary task of driving the vehicle, as well as their impact on overall performance of transportation systems. Besides current industrial achievements that feature today's vehicles with a number of important driving assistance systems, the perspective of autonomous driving vehicles populating urban settings pose even more challenging issues.

Also, the information and functionalities that rely on new ways of communication have to be presented in a non-intrusive way while complying with specific design requirements. A system that guarantees efficiency of use, comfort and user satisfaction is inarguably an important contribution towards a more conscious driving behavior that directly results from the adoption of IV technologies.

TOPICS OF INTEREST

The HFIV'17 welcomes and encourages contributions reporting on original research, work under development and experiments of different fields related to Human Factors. Some topics of interest include (but are not limited to) the following:

- Intelligent user interfaces
- Human-machine interaction
- Human-in-the-loop simulation
- Cognitive aspects of driving
- Interaction with Autonomous Vehicles
- Human behavior and capability, affecting system design and operation
- Data sources, naturalistic data and synthetic data
- Behavior Modeling, Simulation and Analysis
- Methodologies to optimize overall system performance
- Tools and approaches to analyze human factors
- Ergonomics of traveler information systems
- Anthropometric layout of vehicular technical systems
- Mixed Reality
- Cross-Cultural Design
- Augmented Cognition

- User Experience and Usability
- User Interfaces for Autonomous Vehicles
- Computer Aided Ergonomics Analysis
- Effects of in-vehicle systems on driver performance
- Tools and methodologies for usability assessment
- Input/Output modalities in system ergonomic design
- Learning, Anticipation, and Adaptation balance
- Methodologies for driver training

SUBMISSION INSTRUCTIONS AND PUBLICATION

Prospective authors are invited to submit contributions reporting on their current research and ideas that motivate discussion during the workshop. Each paper will be analyzed by an International Program Committee according to quality of presentation, relevance and potential contribution.

Accepted papers will be included in the conference proceedings as workshop papers and will be indexed in the IEEE Xplore Digital Library. Authors must follow the IEEE Conference format in the preparation of their manuscripts of maximum 6 pages in standard IEEE double column PDF format and submit them through the conference submission system for peer-review by the International Program Committee. Manuscripts will be submitted selecting the code number for the Workshop on Human Factors in Intelligent Vehicles.

All accepted papers will imply that at least one of the co-authors attends the workshop to present the work. Authors will be given a certain time to orally present their papers and discussion will be actively motivated among attendees.

Camera-ready manuscripts must be sent due on Aug 10th, 2017. Further and up-to-date information can be found on the official web site of the workshop at **http://hfiv.net/**

IMPORTANT DATES

- Papers submission: **Jun 30th, 2017**
- Paper acceptance notification: **Jul 25th, 2017**
- Camera-ready version due: **Aug 10th, 2017**
- Workshop sessions: **Monday, October 16 2017**

HFIV'17 WORKSHOP ORGANIZATION

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