

The First International Conference on Universal Village

16-17 Jan, 2013 Beijing, China

<http://universal-village.org/>

This is the call-for-paper to cordially invite you to participate in the first International Conference on Universal Village (UV2013) to be held on January 16-17, 2013 in Beijing. MIT Universal Village Program at Intelligent Transportation Research Center (MIT ITRC) is the founding organizer of the conference. We are collaborating with Tsinghua University and Fujitsu Research Center in China to co-host the conference at Tsinghua University in Beijing. IEEE Intelligent Transportation Systems Society (IEEE ITSS) is the technical co-sponsor of the conference. Details of the conference are available at www.universal-village.org.

The “Universal Village” represents our vision for the future society, and comprises the following aspects: multi-functional multi-format communities and a new life style incorporating the ideal mixture of city and suburban areas. The new vision demands a systematic top-down design approach to provide practical solutions to challenges arising from current urbanization trends and to improve the quality of life using modern technologies.

The conference will explore technologies that may bring true intelligence to the Universal Village as well as its major subsystems, including intelligent health care, intelligent transportation, intelligent environment, intelligent energy management and protection of the environment. The conference will address not only the design, development, implementation and engineering of the whole system and its intelligent subsystems, but also the technical details on infrastructure layer, informational layer and new materials, etc. The conference will focus on promoting the research on the integration and dynamic interactions among different components of urbanization and the dynamic impact of sub-components on the system as a whole. Furthermore, the conference will discuss how to effectively collaborate among different research fields and among different organizations including government, academic and industries. The conference will elaborate the regional and culture factors as well as their impacts on the choices of regional development paths and the key technologies appropriate for different countries and regions, and venues of potential international collaboration. Besides these technical aspects, the conference covers the human and social aspects of the Universal Village, the impact of the new vision on life style, economics, and future society.

Please submit your paper to universal.village.submit@gmail.com. Should you be interested in organizing a Special Session UV2013 in Beijing, please contact us at universal.village.conf@gmail.com. Please kindly be aware that there is no financial support provided for our invitees. All participants are required to register for the conference.

We very much look forward to seeing you in Beijing, 2013 !

With our best regards,

Professor Berthold K. P. Horn, General Chair of UV 2013
Dr. Ichiro Masaki, Founding Chair of UV 2013
Dr. Yajun Fang, Program Chair of UV 2013

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UV2013 Suggested Topics

| Systems, Applications & Regional Factors | Components & System Integration |
|---|--|
| <ul style="list-style-type: none">■ Subsystems of the Universal Village<ul style="list-style-type: none">➤ Intelligent Environment<p>Smart commercial and residential complexes, smart villages, smart communities, etc., focusing on:</p><ul style="list-style-type: none">○ Intelligent security monitoring○ Intelligent information distribution & services➤ Intelligent Transportation<ul style="list-style-type: none">○ Intelligent technologies to enhance safety, efficiency & convenience○ Environmental friendly vehicles and other new emerging vehicles➤ Intelligent Healthcare<p>Intelligent & distributed hospitals, recuperation centers, intelligent senior houses, focusing on:</p><ul style="list-style-type: none">○ Intelligent hospital administration & management technologies○ Intelligent healthcare monitoring & prediction○ Tele-medicine & assistive technologies○ Mobile-health and intelligent ambulance technologies➤ Intelligent Energy Management & Environment Protection<p>Intelligent adaptation based on human activities, health status, and weather conditions for buildings, community, or environment</p>■ Interaction and Integration of Subsystems<ul style="list-style-type: none">○ Interaction & mutual impact between the whole system and its subsystems○ Interaction & mutual impact among subsystems○ Integration of subsystems and the design of the whole system■ Regional Factors and Future Directions<ul style="list-style-type: none">○ Impact of regional factors on the system design○ Future research directions based on the demand of the whole system | <ul style="list-style-type: none">■ Hierarchical Layers & Components<ul style="list-style-type: none">➤ Infrastructure Layer<ul style="list-style-type: none">○ Intelligent sensor & communication network○ Cloud and mobile computing○ Event-driven data compression & storage○ New materials, devices & components➤ Informational Layer<ul style="list-style-type: none">○ Multi-platform information retrieval & visualization, data sharing & data integration, data fusion & data mining (across TV net, mobile net, Internet)○ Smart response systems for emergency and accidents■ System Implementation<ul style="list-style-type: none">➤ Technical<ul style="list-style-type: none">○ Dynamic impact of subsystem implementation○ Large complex system theories➤ Social<ul style="list-style-type: none">○ Cultural and political factors○ Impact on future life style and society○ Inter-entity & international collaboration such as, collaboration among different government organizations, different companies, and different universities |

For any questions, send email to universal.village.conf@gmail.com.

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For more details, please refer to www.universal-village.org.

Technical co-sponsor: IEEE Intelligent Transportation Systems Society