

ASEAN IVO Forum 2019

Call for Presentations

The ASEAN IVO Forum 2019 will provide a place for all ASEAN IVO members to exchange ideas, discuss R&D topics and coordinate projects. Any and all members of ASEAN IVO can apply for the ASEAN IVO Forum 2019. We are currently accepting abstracts for presentations.

1. Topics

From core research to real world application, ASEAN IVO focuses on a broad range of topics in the field of ICT. Particularly with regards to providing solutions for specific regional needs or environmental or social problems, great emphasis is placed on not just fundamental research but practical solutions. Projects would ideally have a strong outlook to conduct a demonstration by the final year of the project. Proposals from all technical fields are welcome and they will be evaluated on the potential benefit of the output.

1) ICT for food

As food is a common need for all people, ensuring food security (i.e. food availability and regional self-sufficiency) is a key concern for every country. The focus of this topic is for ICT applications providing specific solutions to food security issues in the ASEAN region, specifically the development of applications and integrated systems for R&D in all fields addressing food availability, from environment and agriculture through the supply chain to consumption and waste management.

<u>Keywords for Technology Development:</u> IoT Application, Traceability, Sensor Network, Wireless Communication, 4G/5G, Big Data, Cloud Computing.

Keywords for Application Development: Agriculture, Aquaculture, Animal husbandry, Farming, Disease Management, Pandemic Influenza, Waste and Pollution Management, Supply Chain.

2) ICT for Environment Protection and Disaster Prevention

As the population grows and becomes more urbanized, there has been a massive increase in material needs and environmental impact as well as demand for digital infrastructure to support people's lifestyles and communication, so that environment monitoring and protection has become an important issue to human



society. Today, natural disasters are occurring more frequently and with increasing intensity. Also, as well as for disaster prevention and response, environment monitoring is key for stable infrastructure. This topic focuses not only on technologies, but also applications and integrated systems for R&D.

<u>Keywords for Technology Development:</u> IoT Application, Sensor Network, Wireless Communication, 4G/5G, Big Data, Cloud computing, Satellite communication, Lidar sensors, Doppler radars, UAV and Airborne platforms, Spatial technologies, Landscape, Infrastructure resilience.

Keywords for Application Development: Landslides, Coastal resource mapping, Disaster mitigation, Assessment and conservation, Rainforest protection, Space environment monitoring, Environment protection, Climate change.

3) ICT for a Secure and Smart Community

With the internationalization and regionalization of ASEAN, we are facing many difficulties, such as cultural differences and social adaptation. Additionally, with rapid urbanization, cities face a variety of risks, concerns, and problems. The unprecedented rate of urban growth creates an urgency in finding smarter ways to manage the accompanying challenges. This topic is a challenging one which does not only focus on technologies, but also applications and integrated systems, including development of useable applications in a real-life context.

<u>Keywords for Technology Development:</u> Artificial intelligence, Multilingual speech and language processing, Speech enhancement, Blockchain, Digital identification, Data validation, Accessibility, Cryptographic verification, Transparency, e-Voting, e-Commerce, Information system reliability, Secure IoT/SDN, Cryptography

<u>Keywords for Application Development:</u> Real-life application, Environment adaptation, Smart city, Smart village, Administrative cost, Digital economy, Energy efficiency, Sustainability, Travel booking and logistics, Tourist travel assistance, Safety and surveillance, Medical tourism, Cultural tourism, Travel database and data analytics, Monitoring/detection systems, Maritime and river security, Monitoring and tracking of sea and inland vessels.

4) ICT related Technologies and Applications

Proposals in any ICT-related topic are welcome if sufficient relevance to the above themes can be demonstrated.



2. Important Dates

- 1) Deadline for abstract submission: Oct. 7, 2019
- 2) Forum registration deadline for speakers: Oct. 7, 2019
- 3) ASEAN IVO Forum 2019: Nov. 20, 2019

3. Venue

(Tentative): Manila, The Philippines Mapúa University, The Philippines Advanced Science and Technology Institute, The Philippines

4. Travel and Accommodation

NICT can provide a round-trip discount economy class flight ticket and hotel accommodation for speakers of all presentations selected for support.

5. Review and Selection

- (1) The Steering Committee of ASEAN IVO will evaluate each submission for technical merit and other relevant factors. In some cases, modifications may be recommended.
- (2) In principle, two speakers from each country are selected to present under NICT's travel and accommodation support, after the submission has passed the evaluation. If a speaker is recommended by the Steering Committee and will pay their own expenses, they are also welcome to give a presentation.
- (3) Approved presentations will be published on the ASEAN IVO website.
- (4) Presentation speakers are expected to cooperate with NICT for administrative procedures.

6. Submission

- (1) Procedure: Submit applications by filling in all necessary items in the submission and registration form and e-mailing it by attachment in MS Word and PDF format.
- (2) Submit to: ASEAN IVO Secretariat

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