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# IAI 2019: Industrial Artificial Intelligence

## IAI 2019

Covering both theory and applications, the Symposium will provide an ideal opportunity for presenting new results and developments in:

- Industrial process intelligent sensing and modeling, including first principles modeling, data based modeling, multimodal human-computer interaction and system modeling.
- Computational intelligence, including data mining and big data analytics, machine learning approaches such as neural networks, fuzzy logic, evolutionary computation.
- AI-driven cooperative autonomous control, including: new intelligent theory and methods, such as cooperative control, autonomous control, deep enhanced learning, multi-agent collaborative sensing and optimization.
- AI-driven industrial process operational optimization decision-making, including: intelligent decision system architecture and methods, such as non-convex optimization, operation optimization control, dynamic intelligent optimization, intelligent control and optimization, feature extraction and knowledge acquisition, intelligent decision using incomplete information, data- and model-enabled operational optimization, reinforcement learning for real-time optimization.
- AI-driven abnormal situation monitoring, prediction, self-healing control and self-optimization, including big data based remote visual monitoring, and virtual manufacturing.
- Dynamic performance assessment, control performance monitoring and assessment, and predictive maintenance.
- Applications: For the visualization and remote monitoring of process industries such as smart grid, non-ferrous, petrochemical, sewage treatment, for automating robots, drones, aircraft, submersibles, unmanned vehicles and other sports systems, and AI related applications in perception, cognition, decision making, control, and interaction.

## SPONSORS

IAI 2019 is sponsored by Northeastern University , China and technically co-sponsored by IEEE Computational Intelligence Society, IEEE Industrial Electronics Society, and Technical Committee on Big Data of Chinese Association of Automation.

## SHENYANG, CHINA

Shenyang is the largest city of Northeast China and the economic and cultural center of Liaoning Province. It has the largest airport in the northeastern region of China, with direct flights to over 120 domestic cities and 20 flights to major Asian cities. The climate in July is between 21°C and 29°C. Tourist sites include the Imperial Palace, East Mausoleum, North Mausoleum, Nanguan Catholic Church, Benxi Water Cave, and the Marshal's Mansion. More information about Shenyang can be found at

<https://en.wikipedia.org/wiki/Shenyang> or  
<http://www.chinahighlights.com/shenyang/>.

## CALL FOR PAPERS

Authors are encouraged to submit papers, invited sessions. All papers must be prepared in accordance with the publication requirements.

The length of draft papers is limited to 8 double-column pages, and final papers are restricted to 6 pages. Invited session proposals should include titles of 6 papers and a 1-page summary of the aim and the content of the invited session. If an invited session is not accepted, all corresponding papers will be evaluated individually as regular submissions.

All papers will be accepted with the understanding that the authors will present them at the symposium. At least one author of every accepted paper will be required to register for the symposium before uploading the final version. For more information on how to submit, please visit: <http://conf.neu.edu.cn/iai2019/>

## Important Deadlines

Submission of draft papers, invited sessions & workshops proposals	<b>31-MARCH-2019</b> 15 April 2019
Acceptance Notification	31 MAY 2019
Submit final papers	1 JULY 2019

## Registration fees

Items/Types	Early Bird Registration <i>Before JUNE 30, 2019</i>	Regular Registration <i>After JUNE 30, 2019</i>
IEEE Member	\$700 USD	\$850 USD
Non-IEEE members	\$850 USD	\$1000 USD
IEEE student member	\$400 USD	\$500 USD
Student nonmember	\$500 USD	\$600 USD
CIS/IES/CAA Members	\$630 USD	\$765 USD
Life Member	\$400 USD	\$400 USD

## AWARDS

IAI 2019 awards to honor outstanding papers presented at this Congress. The awards include:

- Best Paper Award
- Student Outstanding Paper Award
- Poster Paper Award

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The selected papers presented at this conference will be recommended to publish in the Control Engineering of China (a Chinese core Journal).