4th International Conference
Complex Systems Design & Management Asia

September 21-22, 2020
Renaissance Beijing Wangfujing Hotel, Beijing, China

2020年9月21-22日/北京金茂万丽酒店

CSD&M Asia 2020 Web Site: https://www.2020.csdm-asia.net/
Designing & constructing efficiently large-scale industrial systems is today a strategic challenge for the industry which requires new engineering practices as well as sophisticated theoretical tools.

The Complex Systems Design & Management (CSD&M) conference is an international academic-industrial-governmental transversal forum for all actors working on complex industrial systems.

- **Conference dates:** 21-22 September 2020
- **Location:** Renaissance Beijing Wangfujing Hotel, Beijing, China
- **Organizers:** CESAMES & CSAA
- **Keynotes theme:** Digital Transformation in Complex Systems Engineering
- **Current sponsors:** (more to come)

**General Co-Chairs**

- **KROB Daniel**
  - Institute Professor, Ecole Polytechnique
  - INCOSE Fellow
  - President, CESAMES

- **Dr. ZHANG Xinguo**
  - Distinguished Professor, Director of Complex Systems Engineering Research Center, Tsinghua University
  - INCOSE ESEP President, INCOSE Beijing Chapter

**Organizing Committee Chair**

- **YAO Junchen**
  - Secretary General
  - CSAA

**Program Committee Co-Chairs**

- **LI Lefei**
  - Associate Professor
  - Tsinghua University

- **ZHANG Hongjun**
  - President of the Systems Engineering Research Institute
  - CSSC
CSD&M was created in France in 2010 by Prof. KROB Daniel and has been organized every year by the French non-profit organization CESAMES (系思迈系统架构协会), with guidance & support of the Dassault Aviation – DCNS – DGA – Thales « Complex Systems Engineering » industrial chair of Ecole Polytechnique;

CSD&M Asia was created in 2014. After 3 editions in Singapore and thanks to INCOSE, CESAMES shall co-organize the 2020 Edition in Beijing with CSAA (Chinese Society of Aeronautics and Astronautics 中国航空学会), under the precious guidance of Dr. ZHANG Xinguo.
Presentation of CSD&M Asia 2020

CONFERENCE SCOPE

As usual, the CSD&M Asia conference is intended to be a KEY MEETING POINT in Asia-Pacific area for industrial, academic and governmental actors interested in Model-Based Systems Engineering and complex projects management. Each presentation in the conference usually covers 2 types of topics:

- an industrial domain
- a scientific or technical topic

As mentioned, the CSD&M Asia has been successful with important research topics of academies and project topics of industries and governmental agencies. This 4th edition in Beijing will continue to open up to diverse and advanced topics such as defense, aviation, space, nuclear, energy, health, transportation (train, ship and vehicle), electronics, emerging technologies…. So any paper or presentation subject can cover one or multiple topics of the below table:

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<thead>
<tr>
<th>Industrial Domains</th>
<th>Scientific &amp; Technical Topics</th>
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<tr>
<td>- Aerospace</td>
<td>- Systems fundamentals</td>
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<td>- Automotive</td>
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<td>- Communications &amp; E-services</td>
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<td>- Defense &amp; Security</td>
<td>- Big-data for industrial applications</td>
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<td>- Electronics &amp; Robotics</td>
<td>- Systems manufacturing</td>
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<td>- Energy &amp; Environment</td>
<td>- Systems Modeling &amp; Simulation</td>
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<td>- Healthcare &amp; Welfare services</td>
<td>- System optimization</td>
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<tr>
<td>- High-Tech</td>
<td>- System project management</td>
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<tr>
<td>- Logistics &amp; Supply chain</td>
<td>- Systems safety</td>
</tr>
<tr>
<td>- Ship &amp; Transportation</td>
<td>- Systems serviceability</td>
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<tr>
<td>- Software industry</td>
<td>- Systems Technology &amp; Policy</td>
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<tr>
<td>- Urban &amp; Public infrastructures</td>
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Presentation of CSD&M Asia 2020

CONFERENCE PUBLICATION POLICY

The proceedings of CSD&M Paris (every year) and CSD&M Asia (every two years) are published by Springer Verlag in dedicated book series, and referenced & indexed in DBLP, EI Compendex, ISI Clarivate and Scopus, examples below:
Presentation of CSD&M Asia 2020

LAST EDITION CSD&M 2018 IN PARIS – PARTICIPATION

Job position:
- Academic (professor, researcher, PhD, student)
- Architect / Engineer (system, solution, MBSE, R&D...)
- Director (technical, engineering, R&D, innovation...)
- Executive Management (CEO, VP, CTO, CIO)
- Middle Management (project leader, manager)

Industries:
- Aeronautics
- Aerospace
- Automotive
- Defense/Naval
- Energy
- Other

AIRBUS
framatome
arianeGROUP
apsys
dgac
HONDA
GE
PSA
AIR LIQUIDE
DASSAULT AVIATION

ZODIAC AEROSPACE
EDF
Valeo
RATP
NUS
SAFRAN
ALSTOM
MBDA
ENGIN

THALES
VINCI
CONSTRUCTION
University of BRISTOL
GROUPE RENAULT
Georgia Tech
CNRS
NAVAL GROUP
Schneider Electric

University of Minnesota
Presentation of CSD&M Asia 2020

LAST EDITION CSD&M ASIA 2018 IN SINGAPORE – PARTICIPATION

**Job position:**
- Academic (professor, researcher, student)
- Engineer
- Director
- Executive Management
- Middle Management (manager, project leader)

**Industries:**
- Aerospace
- Defense
- Governmental Agencies
- Healthcare
- Transport
- Other (energy, naval)
## Presentation of CSD&M Asia 2020

### MEMBERS OF ORGANIZING COMMITTEE 2020

<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Role</th>
<th>Organization/Institution</th>
<th>Country</th>
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</thead>
<tbody>
<tr>
<td>YAO Junchen</td>
<td>Secretary General of Chinese Society of Aeronautics and Astronautics</td>
<td>CSAA</td>
<td>China</td>
</tr>
<tr>
<td>FLEURY Gilles</td>
<td>Director &amp; Former director of Centrale Beijing (Beihang Univ.)</td>
<td>Paris Campus Sciences po</td>
<td>France</td>
</tr>
<tr>
<td>GONG Minyan</td>
<td>Director</td>
<td>CESAMES China</td>
<td>China</td>
</tr>
<tr>
<td>LANDRY Serge</td>
<td>Director INCOSE Asia-Pacific</td>
<td>INCOSE Asia-Pacific</td>
<td>Singapore</td>
</tr>
<tr>
<td>LIU TongLong</td>
<td>President</td>
<td>Nortek</td>
<td>China</td>
</tr>
<tr>
<td>LIU Xiao</td>
<td>Prof. &amp; Dir International Cooperation</td>
<td>Shanghai Jiao Tong University</td>
<td>China</td>
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<tr>
<td>LUNNEY Kerry</td>
<td>President Elect of INCOSE Global</td>
<td>INCOSE</td>
<td>Australia</td>
</tr>
<tr>
<td>LIU Dong</td>
<td>Managing Director of Accenture Greater China</td>
<td>Accenture Beijing</td>
<td>China</td>
</tr>
<tr>
<td>YU Ce</td>
<td>Director of Dpt. International Cooperation Science Technology Consulting</td>
<td>CSAA</td>
<td>China</td>
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### Members of Program Committee 2020 – Academy List

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Position</th>
<th>Department/Institution</th>
<th>Institution/Location</th>
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</thead>
<tbody>
<tr>
<td>LI (Co-Chair)</td>
<td>Lefei, Associate Professor, Head of the SKL-MCCS</td>
<td>Department of Industrial Engineering</td>
<td>Tsinghua University</td>
</tr>
<tr>
<td>CARDIN</td>
<td>Michel-Alexandre, Associate Professor</td>
<td>Faculty of Engineering, Dyson School of Design Engineering</td>
<td>Imperial College</td>
</tr>
<tr>
<td>DE WECK</td>
<td>Olivier, Professor, INCOSE &amp; CESAMES Fellow</td>
<td>Department of Aeronautics and Astronautics</td>
<td>Massachusetts Institute of Technology</td>
</tr>
<tr>
<td>FENG</td>
<td>Yanghe, Associate Professor</td>
<td>College of Systems Engineering</td>
<td>National University of Defense Technology</td>
</tr>
<tr>
<td>GAO</td>
<td>Xinghai, Professor</td>
<td>Unmanned System Institute</td>
<td>Beihang University</td>
</tr>
<tr>
<td>GUAN</td>
<td>Ruoxi, Associate Director</td>
<td>Complex Systems Engineering Research Center</td>
<td>Tsinghua University</td>
</tr>
<tr>
<td>HAMMAMI</td>
<td>Omar, Professor</td>
<td>Department of Systems Engineering</td>
<td>ENSTA</td>
</tr>
<tr>
<td>JACKSON</td>
<td>Peter, Professor, Head of Pillar, Institute Director</td>
<td>Engineering systems division</td>
<td>Singapore University of Technology &amp; Design</td>
</tr>
<tr>
<td>KOO</td>
<td>John, Director of Cyber-Physics Systems</td>
<td>Cyber-Physics Systems</td>
<td>Hong Kong Applied Science and Technology Research Institute</td>
</tr>
<tr>
<td>LV</td>
<td>Yisheng, Associate Professor</td>
<td>The State Key Laboratory for Management and Control of Complex Systems, Institute of Automation</td>
<td>Chinese Academy of Sciences</td>
</tr>
<tr>
<td>RAUZY</td>
<td>Antoine, Professor, CESAMES Fellow,</td>
<td>Department of Mechanical and Industrial Engineering</td>
<td>Norwegian University of Science and Technology</td>
</tr>
<tr>
<td>WANG</td>
<td>Chen, Associate Professor</td>
<td>Department of Industrial Engineering</td>
<td>Tsinghua University</td>
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<tr>
<td>WANG</td>
<td>Yingxun, Professor</td>
<td>Unmanned System Institute</td>
<td>Beihang University</td>
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## MEMBERS OF PROGRAM COMMITTEE 2020 – INDUSTRY LIST

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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</thead>
<tbody>
<tr>
<td>ZHANG Hongjun</td>
<td>President</td>
<td>Systems Engineering Research Institute</td>
<td>China</td>
</tr>
<tr>
<td>AMBROSO Annalisa</td>
<td>Systems Engineering Responsible</td>
<td>Systems Engineering Department</td>
<td>FRAMATOME</td>
</tr>
<tr>
<td>DAURON Alain</td>
<td>Chief Expert Systems Architect</td>
<td>Architecture Department</td>
<td>RENAULT-NISSAN</td>
</tr>
<tr>
<td>FERROGALINI Marco</td>
<td>Vice President, modeling &amp; simulating</td>
<td>Digital design, manufacturing &amp; services program</td>
<td>AIRBUS</td>
</tr>
<tr>
<td>HOU Shudong</td>
<td>Chief Expert Engineer</td>
<td>Engineering Department</td>
<td>HUAWEI</td>
</tr>
<tr>
<td>ONG Robert</td>
<td>Technical Director</td>
<td>Business Development</td>
<td>No Magic</td>
</tr>
<tr>
<td>QIE Yongjun</td>
<td>Technical Director</td>
<td>AVIC Digital Corporation Ltd.</td>
<td>China</td>
</tr>
<tr>
<td>SCHREINEMAKERS Paul</td>
<td>Europe &amp; Middle East director</td>
<td>Europe &amp; Middle East Chapter</td>
<td>INCOSE</td>
</tr>
<tr>
<td>STARK Rainer</td>
<td>Director</td>
<td>Virtual Product Creation Division</td>
<td>FRAUNHOFER INSTITUTE</td>
</tr>
<tr>
<td>SUN Zhixiao</td>
<td>Vice Director</td>
<td>Shenyang Aircraft Design &amp; Research Institute</td>
<td>China</td>
</tr>
<tr>
<td>XING Chenguang</td>
<td>Director</td>
<td>Systems Engineering Institute</td>
<td>China</td>
</tr>
<tr>
<td>WEN Yuejie</td>
<td>Senior Engineer</td>
<td>Systems Engineering Strategy</td>
<td>China Academy of Space Technology</td>
</tr>
<tr>
<td>YEE Victor</td>
<td>Business Development Manager</td>
<td>IBM Hong Kong</td>
<td>IBM</td>
</tr>
<tr>
<td>ZHANG John</td>
<td>Chief Digital Design Scientist</td>
<td>R&amp;D Competence Center - 2012 Lab</td>
<td>HUAWEI</td>
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Presentation of CSD&M Asia 2020

TENTATIVE ELEMENTS OF THE 2020 PROGRAM

2 days in Beijing to exchange in the field of systems design and management about:
- societal & industrial challenges;
- scientific & methodological state of the art.

• About 8 Chinese and international keynotes presentations on the theme: “Digital Transformation in Complex Systems Engineering”;
• Many selected teams that present their academic and professional works.

More than 300 international academic & industrial attendees among the main actors of the international systems engineering community

Opportunities for networking and a conference dinner gathering speakers, organizers, partners and participants in a prestigious place of Beijing

A poster session to promote works in progress and discuss on topics related to complex systems

Demonstrations and booths to present offers, services and the latest systems design & simulation technological tools
4th International Conference
Complex Systems Design & Management Asia

September 21-22, 2020
Renaissance Beijing Wangfujing Hotel, Beijing, China

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Please follow the conference by the web site:
https://www.2020.csdm-asia.net/

Please care and broadcast CESAMES’s WeChat:
CESAMES系思迈系统架构企业管理

Event co-organized by