

# IEEE-CYBER 2023 Conference Program

| July 11 (Tuesday) |  |
|-------------------|--|
| 14:00-18:00       | Registration   |
| 18:00-20:00       | <b>Welcome Dinner</b><br><i>(for all registered attendees)</i> |

## July 12 (Wednesday)

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|-----------------|--|--|--|---|--|---|
| <b>location</b> | <b>Grand Hall 1 (宴会厅1), B2</b>   |  |  |   |  |   |
| 08:30-08:45     | <b>Opening Ceremony</b>  |  |  |   |  |   |
| 08:45-09:30     | <i>Plenary Talk 1: Tianyou Chai, Northeastern University, China</i><br><b>Industrial Metaverse-based Intelligent PID Tuning System for Complex Industrial Processes</b>          |  |  |   |  |   |
| 09:30-10:15     | <i>Plenary Talk 2: Guangren Duan, Harbin Institute of Technology, China</i><br><b>Fully Actuated System Approach for Control</b>   |  |  |   |  |   |
| 10:15-10:30     | <i>Tea Break</i>   |  |  |   |  |   |
| 10:30-11:15     | <i>Plenary Talk 3: Haibin Yu, Shenyang Institute of Automation, Chinese Academy of Sciences</i><br><b>Digital twin based robotic system for precision machining and assembly</b> |  |  |   |  |   |
| 11:15-12:00     | <i>Plenary Talk 4: Zengguang Hou, Institute of Automation, Chinese Academy of Sciences</i><br><b>Enhancement of Engagement Based on BCI for Rehabilitation Robotics</b>          |  |  |   |  |   |
| 12:00-13:30     | <i>Lunch (for all registered attendees)</i>  |  |  |   |  |   |
| <b>location</b> | <b>Grand Hall 3<br/>(宴会厅3)</b>   | <b>Nanghai 2<br/>(南海2)</b>                                   | <b>Nanghai 3<br/>(南海3)</b>   | <b>Bohai<br/>(渤海)</b>   | <b>Huanghai<br/>(黄海)</b>                                       | <b>Donghai<br/>(东海)</b>                                     |
| 13:30-14:45     | <b>WeA1: Best Paper Session I</b><br>(ID: 45, 106, 195, 218, 37)   | <b>WeA2: Industrial CPS I</b><br>(ID: 78, 87, 112, 125, 223) | <b>WeA3: State Estimation and Fusion</b><br>(ID: 77, 202, 239, 258, 299) | <b>WeA4: Nonlinear Control Systems I</b><br>(ID: 219, 305, 306, 136, 276) | <b>WeA5: Mobile Robot</b><br>(ID: 5, 193, 251, 301)            | <b>WeA6: Time-Delay Systems</b><br>(ID: 137, 222, 273, 210) |
| 14:45-16:00     | <b>WeB1: Best Paper Session II</b><br>(ID: 38, 51, 200, 303, 312)  | <b>WeB2: Industrial CPS II</b><br>(ID: 252, 284, 285, 288)   | <b>WeB3: Optimization of Networks</b><br>(ID: 36, 41, 42, 245, 257)      | <b>WeB4: Nonlinear Control Systems II</b><br>(ID: 56, 120, 205, 216, 232) | <b>WeB5: Robot Application</b><br>(ID: 65, 203, 311, 323, 324) | <b>WeB6: Adaptive Control</b><br>(ID: 30, 58, 300, 68, 89)  |
| 16:00-16:20     | <i>Tea Break</i>   |  |  |   |  |   |

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| 16:20-17:35     |  |  | <b>WeC2: Target Detection and Control</b><br>(ID: 12, 69, 149, 237, 307) | <b>WeC3: Multi-Agent Collaboration</b><br>(ID: 308, 314, 318, 22, 33) | <b>WeC4: Nonlinear Control Systems III</b><br>(ID: 32, 86, 263, 179, 250) | <b>WeC5: Intelligent Detection</b><br>(ID: 21, 17, 116, 192, 326) | <b>WeC6: Manipulator Control</b><br>(ID: 29, 101, 233, 169) |
| <b>location</b> |  | <b>Poster Hall</b>   |  |   |   |   |   |
| 13:30-17:35     |  | <p>WePo1: Poster Session 1</p> <p>(ID: 67, 115, 147, 170, 186, 215, 244, 286, 15, 121, 134, 155, 172, 189, 217, 247, 289, 18, 53, 71, 99, 122, 135, 175, 190, 220, 253, 292, 20, 54, 74, 100, 123, 157, 191, 212, 226, 70, 94, 98, 23, 57, 48, 139, 129, 133, 105, 141, 156, 167, 176, 180, 196, 201, 211, 229, 235, 283, 296, 297, 302)</p> <p>The poster can be displayed after 13:30, and the author needs to be present for explanation between 16:20-17:35.</p> |  |   |   |   |   |
| 18:00           |  | <p><b>Conference Dinner</b></p> <p>(for all registered attendees)</p>  |  |   |   |   |   |

## July 13 (Thursday)

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|-----------------|---|--|---|---|--|---|
| <b>location</b> | <b>Grand Hall 1, B2</b>   |  |   |   |  |   |
| 08:45-09:30     | <i>Plenary Talk 5: <b>Derong Liu</b>, Southern University of Science and Technology, China</i><br><b>Control Paradigms for Intelligent Manufacturing</b>  |  |   |   |  |   |
| 09:30-10:15     | <i>Plenary Talk 6: Ye-Hwa Chen, Georgia Institute of Technology, USA</i><br><b>Cyberattack Resilient Control for Cyber-Physical Systems:<br/>A New Approach to Denial-of-Service (DoS)</b>                    |  |   |   |  |   |
| 10:15-10:30     | <i>Tea Break</i>  |  |   |   |  |   |
| 10:30-11:15     | <i>Plenary Talk 7: <b>Kok Lay Teo</b>, Curtin University, Australia</i><br><b>Optimal Control Computation for Optimal Control Problems Governed by<br/>Nonlinear Time Delay Systems</b>                       |  |   |   |  |   |
| 11:15-12:00     | <i>Plenary Talk 8: <b>Cailian Chen</b>, Shanghai Jiao Tong University, China</i><br><b>Joint Design of Distributed Sensing and Cooperative Transmission<br/>for Field-level Industrial Internet of Things</b> |  |   |   |  |   |
| 12:00-13:30     | <i>Lunch (for all registered attendees)</i>   |  |   |   |  |   |
| <b>location</b> | <b>Grand Hall 3<br/>(宴会厅3)</b>  | <b>Nanhai 2<br/>(南海2)</b>  | <b>Nanhai 3<br/>(南海3)</b>   | <b>Bohai<br/>(渤海)</b>   | <b>Huanghai<br/>(黄海)</b>   | <b>Donghai<br/>(东海)</b>   |
| 13:30-14:45     | ThA1: <b>Measurement and Sensor</b><br>(ID: 61, 79, 80, 81, 104)  | ThA2: <b>Advances in Power Grids</b><br>(ID: 148, 151, 152, 153, 154)                    | ThA3: <b>Distributed Optimization, Control, and Networked Games</b><br>(ID:159, 231, 234, 242, 243) | ThA4: <b>Switched Control Systems</b><br>(ID: 73, 93, 182, 249)   | ThA5: <b>Internet of Things</b><br>(ID: 90, 138, 173, 277)               |   |
| 14:45-16:00     | ThB1: <b>Machine Vision and Learning</b><br>(ID: 187, 198, 221, 108, 206)   | ThB2: <b>Intelligent Vehicles and Automatic Driving</b><br>(ID: 259, 269, 309, 294, 158) | ThB3: <b>Path Planning Technique</b><br>(ID: 64, 118, 207, 208, 66)                                 | ThB4: <b>System Identification</b><br>(ID: 52, 178, 128, 325, 88) | ThB5: <b>Virtual Reality Technology</b><br>(ID: 119, 171, 238, 240, 267) | ThB6: <b>Intelligent Equipment</b><br>(ID: 91, 95, 281, 214, 268) |

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|-----------------|--|--|---|---|--|--|
| 16:00-16:20     |  | <i>Tea Break</i>   |   |   |  |  |
| 16:20-17:35     |  |  | <b>ThC3: Networked Control Systems</b><br>(ID: 114, 162, 274, ) | <b>ThC4: Process Industry Automation and Intelligence</b><br>(ID: 31, 35, 47) | <b>ThC5: Sensing and Measurement</b><br>(ID: 28, 246, 265, 224, 291) |  |
| <b>location</b> |  | <b>Poster Hall</b>   |   |   |  |  |
| 13:30-17:35     |  | <p style="text-align: center;">ThPo2: Poster Session 2</p> <p style="text-align: center;">(ID: 13, 44, 97, 255, 293, 55, 75, 102, 126, 140, 160, 177, 227, 260, 295, 24, 76, 103, 127, 163, 197, 228, 261, 25, 59, 84, 142, 164, 181, 199, 266, 26, 60, 92, 109, 130, 144, 166, 183, 209, 230, 275, 315, 39, 62, 110, 131, 145, 184, 280, 320, 43, 63, 96, 113, 132, 146, 168, 185, 213, 236, 321)</p> <p style="text-align: center;">The poster can be displayed after 13:30, and the author needs to be present for explanation between 16:20-17:35.</p> |   |   |  |  |
| 18:00           |  | <b>Conference Banquet and Award Presentation</b><br>(for all registered attendees)   |   |   |  |  |

**July 14 (Friday)**

|             |  | <b>Grand Hall 3</b>   | <b>Donghai</b>  |
|-------------|--|---|---|
| 09:00-10:30 |  | <b>Seminar 1: Distributed Sensing, Transmission and Control for Underwater CPS</b><br>(ID: 82, 83, 313) | <b>Seminar 2: New emerging communication and sensing techniques for cyber-physical systems</b><br>(ID: 270, 272, 282, 287, 290) |