

**2019 6<sup>th</sup> International Conference on  
Control, Decision and Information  
Technologies**



April 23-26, 2019 – Paris, France

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# Draft Program

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Website: <https://codit19.com>

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# CoDIT'19 Technical Program

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<b>April 23, 2019</b>				
<b>09:30 - 12:30 Registration</b>				
<b>12:30 - 14:40 Technical Sessions 1</b>				
<i>Session 1</i>	<i>Session 2</i>	<i>Session 3</i>	<i>Session 4</i>	
<b>14:40 - 15:00 Coffee break</b>				
<b>15:00 - 16:10 Opening Ceremony &amp; Keynote 1</b>				
<b>16:10 - 17:50 Technical Sessions 2</b>				
<i>Session 5</i>	<i>Session 6</i>	<i>Session 7</i>	<i>Session 8</i>	<i>Session 9</i>
<b>April 24, 2019</b>				
<b>08:00 - 10:00 Technical Sessions 3</b>				
<i>Session 10</i>	<i>Session 11</i>	<i>Session 12</i>	<i>Session 13</i>	<i>Session 14</i>
<b>10:00 - 10:20 Coffee break</b>				
<b>10:20 - 11:10 Keynote 2</b>				
<b>11:10- 12:50 Technical Sessions 4</b>				
<i>Session 15</i>	<i>Session 16</i>	<i>Session 17</i>	<i>Session 18</i>	<i>Session 19</i>
<b>12:50 - 14:00 Lunch</b>				
<b>14:00 - 15:40 Technical Sessions 9</b>				
<i>Session 20</i>	<i>Session 21</i>	<i>Session 22</i>	<i>Session 23</i>	<i>Session 24</i>
<b>15:40 - 16:00 Coffee break</b>				
<b>15:40 - 16:30 Keynote 3</b>				
<b>16:30 - 17:50 Technical Sessions 6</b>				
<i>Session 25</i>	<i>Session 26</i>	<i>Session 27</i>	<i>Session 28</i>	<i>Session 29</i>

<b>April 25, 2019</b>				
<b>08:00 - 10:00 Technical Sessions 7</b>				
<i>Session</i> <b>30</b>	<i>Session</i> <b>31</b>	<i>Session</i> <b>32</b>	<i>Session</i> <b>33</b>	<i>Session</i> <b>34</b>
<b>10:00 - 10:20 Coffee break</b>				
<b>10:20 - 11:10 Keynote 4</b>				
<b>11:10 - 12:50 Technical Sessions 8</b>				
<i>Session</i> <b>35</b>	<i>Session</i> <b>36</b>	<i>Session</i> <b>37</b>	<i>Session</i> <b>38</b>	<i>Session</i> <b>39</b>
<b>12:50 - 14:00 Lunch</b>				
<b>14:00 - 15:40 Technical Sessions 9</b>				
<i>Session</i> <b>40</b>	<i>Session</i> <b>41</b>	<i>Session</i> <b>42</b>	<i>Session</i> <b>43</b>	<i>Session</i> <b>44</b>
<b>15:40 - 16:00 Coffee break</b>				
<b>16:00 - 18:00 Technical Sessions 10</b>				
<i>Session</i> <b>45</b>	<i>Session</i> <b>46</b>	<i>Session</i> <b>47</b>	<i>Session</i> <b>48</b>	<i>Session</i> <b>49</b>
<b>Free time</b>				
<b>20:00 - 23:00 Gala Dinner</b>				
<b>April 26, 2019</b>				
<b>08:30 - 10:30 Technical Sessions 11</b>				
<i>Session</i> <b>50</b>	<i>Session</i> <b>51</b>	<i>Session</i> <b>52</b>	<i>Session</i> <b>53</b>	<i>Session</i> <b>54</b>
<b>10:30 - 10:50 Coffee break</b>				
<b>10:50 - 12:50 Technical Sessions 12</b>				
<i>Session</i> <b>55</b>	<i>Session</i> <b>56</b>	<i>Session</i> <b>57</b>	<i>Session</i> <b>58</b>	<i>Session</i> <b>59</b>

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# Keynotes

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**Keynote 1:**

***Resilience Against Sensor Deception Attacks on Cyber-Physical Control Systems***

***Prof. Stéphane Lafortune (IEEE Fellow)***

University of Michigan, USA

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**Keynote 2:**

***Probabilistic Graphical Models: On Learning, Fusion, and Revision***

***Prof. Rudolf Kruse (IEEE Fellow)***

Otto-von-Guericke University of Magdeburg, Germany

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**Keynote 3:**

***Location-Routing Problems: Characteristics and Metaheuristic Algorithms***

***Prof. Paolo Toth***

University of Bologna, Italy

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**Keynote 4:**

***Event-triggered communication in networked control systems***

***Prof. Maurice Heemels (IEEE Fellow)***

Eindhoven University of Technology, The Netherlands

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# Sessions / Papers ID

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<b>Session 1</b>	Title	<b>Transport Optimization</b>
	Papers ID	229 - 331 - 512 - 82 - 205 - 55
<b>Session 2</b>	Title	<b>Smart Grids</b>
	Papers ID	365 - 471 - 476 - 275 - 96 - 213
<b>Session 3</b>	Title	<b>Computer science &amp; Software Engineering</b>
	Papers ID	225 - 289 - 341 - 245 - 368 - 514
<b>Session 4</b>	Title	<b>Signal Processing, Sensor &amp; Instrumentation</b>
	Papers ID	456 - 409 - 127 - 192 - 99 - 253 - 220
<b>Session 5</b>	Title	<b>Control Design Methods</b>
	Papers ID	8 - 363 - 27 - 181 - 440 - 69
<b>Session 6</b>	Title	<b>Artificial Intelligence</b>
	Papers ID	382 - 178 - 279 - 172 - 293 - (WiP-16)
<b>Session 7</b>	Title	<b>WiP Session: Control Methods and Application</b>
	Papers ID	WiP21 - WiP30 - WiP33 - WiP38 - WiP22 - WiP24
<b>Session 8</b>	Title	<b>Automation &amp; Control Applications</b>
	Papers ID	272 - 306 - 132 - 92 - 196 - 506
<b>Session 9</b>	Title	<b>Operational Research</b>
	Papers ID	327 - 232 - 165 - 423 - 295 - 523
<b>Session 10</b>	Title	<b>Data Mining &amp; Artificial Intelligence</b>
	Papers ID	375 - 246 - 65 - 366 - 350 - 25
<b>Session 11</b>	Title	<b>Diagnosis Methods and Applications</b>
	Papers ID	444 - 340 - 239 - 371 - 387 - 155
<b>Session 12</b>	Title	<b>Image Processing</b>
	Papers ID	427 - 42 - 410 - 221 - 379 - 314
<b>Session 13</b>	Title	<b>System Identification</b>
	Papers ID	209 - 118 - 46 - 56 - 206 - 474
<b>Session 14</b>	Title	<b>Special Session on "Failure Prognostics of Complex Systems"</b>
	Papers ID	325 - 367 - 525 - 310 - 116 - 377
<b>Session 15</b>	Title	<b>Special Session on "Robotics and Control Engineering Education"</b>
	Papers ID	269 - 395 - 489 - 250 - 227 - 35
<b>Session 16</b>	Title	<b>Logistics and Supply Chain Management</b>
	Papers ID	45 - 488 - 397 - 17 - 491 - 73

<b>Session 17</b>	Title	<b>Robotics Applications</b>
	Papers ID	39 - 412 - 503 - 294 - 405 - 400
<b>Session 18</b>	Title	<b>Applied Optimization</b>
	Papers ID	115 - 263 - 197- 465 - 265 - 16 - 374
<b>Session 19</b>	Title	<b>Monitoring and Supervision</b>
	Papers ID	439 - 425 - 497 - 335 - 103 - 326
<b>Session 20</b>	Title	<b>Multi-Objective Optimization</b>
	Papers ID	83 - 89 - 422 - 284 - 84 - 194
<b>Session 21</b>	Title	<b>Nonlinear Systems: Modeling and Simulation</b>
	Papers ID	152 - 501 - 144 - 228 - 107 - 207
<b>Session 22</b>	Title	<b>Parallel and Distributed Computing</b>
	Papers ID	486 - 328 - 441 - 418 - 185 - 494
<b>Session 23</b>	Title	<b>Predictive Control</b>
	Papers ID	369 - 135 - 183 - 455 - 199 - 113
<b>Session 24</b>	Title	<b>Special Session on "Fractional order systems: theory and applications"</b>
	Papers ID	102 - 234 - 309 - 76 - 237 - 349 - 235
<b>Session 25</b>	Title	<b>Robotics and Vision Systems</b>
	Papers ID	469 - 393 - 417 - 153 - (WiP-27)
<b>Session 26</b>	Title	<b>Industry and Process Control</b>
	Papers ID	303 - 140 - 78 - 240 - (WiP-34)
<b>Session 27</b>	Title	<b>Combinatorial Optimization (Part 1)</b>
	Papers ID	334 - 434 - 381 - 449 - 157
<b>Session 28</b>	Title	<b>Computational Intelligence</b>
	Papers ID	311 - 85 - 448 - 419 - (WiP-18)
<b>Session 29</b>	Title	<b>Control Applications (part 1)</b>
	Papers ID	138 - 71 - 252 - 70
<b>Session 30</b>	Title	<b>Discrete Event Systems</b>
	Papers ID	47 - 58 - 283 - 12 - 287 - 32
<b>Session 31</b>	Title	<b>Invited Session on "Resilient Control in Large-Scale Networked Cyber-Physical Systems"</b>
	Papers ID	128 - 238 - 117 - 270 - 33 - 87
<b>Session 32</b>	Title	<b>Special Session on "Petri nets models for modeling, control and optimization"</b>
	Papers ID	451 - 407 - 268 - 511 - 286 - 98 - 97
<b>Session 33</b>	Title	<b>Linear Systems</b>
	Papers ID	360 - 136 - 112 - 361 - 313 - 90

<b>Session 34</b>	Title	<b>Modeling and Simulation Problems</b>
	Papers ID	517 - 337 - 146 - 198 - 258 - 60
<b>Session 35</b>	Title	<b>Emergent Methods and Computational Intelligence applications</b>
	Papers ID	248 - 297 - 242 - 324 - 462 - 171
<b>Session 36</b>	Title	<b>Special Session on "Smart and Green Logistics and Transportation Systems"</b>
	Papers ID	351 - 94 - 100 - 330 - 475 - 151
<b>Session 37</b>	Title	<b>Scheduling Problems</b>
	Papers ID	498 - 230 - 264 - 204 - 433 - 222
<b>Session 38</b>	Title	<b>Special Session on "Energy and Control"</b>
	Papers ID	19 - 435 - 520 - 244 - 75 - 298
<b>Session 39</b>	Title	<b>Intelligent Control</b>
	Papers ID	495 - 50 - 392 - 468 - 231 - 29
<b>Session 40</b>	Title	<b>Adaptive Control</b>
	Papers ID	121 - 513 - 51 - 519 - 329 - 323
<b>Session 41</b>	Title	<b>Special Session on "Formal Methods applied to Transportation and Industry 4.0"</b>
	Papers ID	133 - 426 - 282 - 288 - 179 - 137
<b>Session 42</b>	Title	<b>Fault Detection</b>
	Papers ID	502 - 492 - 481 - 484 - 404 - 200 - 342
<b>Session 43</b>	Title	<b>Information and Learning Systems</b>
	Papers ID	443 - 487 - 164 - 110 - 256 - 223
<b>Session 44</b>	Title	<b>Energy Control and Power Systems</b>
	Papers ID	516 - 145 - 257 - 509 - 120 - 524
<b>Session 45</b>	Title	<b>Embedded Systems and Design for Electronic Circuits</b>
	Papers ID	123 - 442 - 458 - 432 - 332
<b>Session 46</b>	Title	<b>Combinatorial Optimization (Part 2)</b>
	Papers ID	480 - 301 - 291 - 260 - 453 - 131
<b>Session 47</b>	Title	<b>Control Theory</b>
	Papers ID	429 - 167 - 177 - 77 - 68
<b>Session 48</b>	Title	<b>Automation &amp; Control Systems Applications</b>
	Papers ID	386 - 285 - 219 - 160 - 88
<b>Session 49</b>	Title	<b>Nonlinear Systems</b>
	Papers ID	80 - 292 - 174 - 236 - 189

<b>Session 50</b>	Title	<b>Control Systems Design</b>
	Papers ID	175 - 346 - 30 - 163 - 424 - 108
<b>Session 51</b>	Title	<b>Decision Making</b>
	Papers ID	304 - 233 - 212 - 348 - 300 - 106 - 531
<b>Session 52</b>	Title	<b>Cloud, Parallel and Distributed Computing</b>
	Papers ID	63 - 416 - 357 - 262- 415 - 81
<b>Session 53</b>	Title	<b>Nonlinear Optimization Problems</b>
	Papers ID	321 - 267 - 210 - 169 - 389 - 141
<b>Session 54</b>	Title	<b>Control Systems with Applications</b>
	Papers ID	478 - 344 - 40 - 86 - 142 - 21 - 527
<b>Session 55</b>	Title	<b>Information Systems</b>
	Papers ID	166 - 413 - 522 - 383 - 187 - 391 - 414
<b>Session 56</b>	Title	<b>WiP Session: Optimization and Decision Making</b>
	Papers ID	WiP2 - WiP4 - WiP278 - WiP19 - WiP20 - WiP31 - WiP25 - WiP46
<b>Session 57</b>	Title	<b>Wireless Communications and Telecommunication Applications</b>
	Papers ID	437 - 454 - 211 - 158 - 402 - 403 - 447
<b>Session 58</b>	Title	<b>Control Applications (part 2)</b>
	Papers ID	378 - 201 - 316 - 271 - 312 - 336 - 208
<b>Session 59</b>	Title	<b>Energy Control Applications</b>
	Papers ID	165 - 347 - 504 - 526 - 191 - 159