1\textsuperscript{st} Doctoral Summer School on Robotics and Intelligent Machines - DRIMS2

Presentation to the DRIM PhD Board

February 21, 2023
DRIMS2 Proposers

Scientific Committee:
• Elena De Momi, Andrea Maria Zanchettin, Matteo Matteucci (POLIMI)
• Giovanni Berselli (UNIGE)
• Nicola Pedrocchi (CNR)
• Matteo Bianchi (UNIPI)
• Calogero Maria Oddo (SSSA)

Constant consultation with:
• Giorgio Cannata (DRIM Coordinator)
• Antonio Bicchi (I-RIM President)
• Maria Fossati, Alessandro Settimi (I-RIM)
Key points of DRIMS2 organization

• DRIMS2 will address the core learning topics of robotics and intelligent machines
• Each day will be organized around a specific topic (robot operating system, mechanical design and actuators, control and human-centered robotics, sensing and perception), with a keynote, basic and advanced tutorials and hands-on sessions; round tables and sessions focusing on soft-skills are planned
• Students will be organized in supervised groups to address practical projects enabled by the acquired competences and available instrumentation
• In-kind support with instruments provided by industrial stakeholders: collaborative robotic platforms already secured, call to be launched soon for additional instruments (e.g., 3D printers and vision systems)
• Financial support via I-RIM budget of ARTES 5.0 EDIH (DRIM Consortium needed for eligibility of costs)
• Industrial sponsorships via «I-RIM supporting memberships» (soci sostenitori) + complementary packages
• Default admission of DRIM PhD students + call for admission of other PhD students (criterion to be finalized: first-comes-first-served or evaluation of applications)
Proposed venue and dates

• Scuola Internazionale di Alta Formazione (SIAF) Volterra: campus that can accommodate up to 200 guests offering accommodation, classrooms, recreation areas, services, didactic supports

• Target number of participants: 100 students + lecturers and support staff

• August 30 – September 5, 2023
# Draft program

<table>
<thead>
<tr>
<th>Wed Aug 30th</th>
<th>Thu Aug 31st</th>
<th>Fri Sept 1st</th>
<th>Sat Sept 2nd</th>
<th>Sun Sept 3rd</th>
<th>Mon Sept 4th</th>
<th>Tue Sept 5th</th>
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<tr>
<td><strong>Course intro</strong></td>
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<td>Robot design and actuators</td>
<td>Control and human-centered robotics</td>
<td>Vision Sensing</td>
<td><strong>TRIP</strong></td>
<td><strong>Tactile Sensing</strong></td>
<td>Basics and advanced tutorials</td>
<td>Project presentation</td>
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<td><strong>Keynote:</strong> Dario Floreano</td>
<td><strong>Keynote:</strong> Alessandro De Luca</td>
<td><strong>Keynote:</strong> Alessio Del Bue (TBC)</td>
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<td><strong>Keynote:</strong> Domenico Prattichizzo</td>
<td><strong>Keynote:</strong> Angelika Peer</td>
<td>Awards</td>
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<td><strong>Basics and advanced tutorials</strong></td>
<td>Supervised hands-on</td>
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<td>Meet the leaders Cannata, Bicchi, Menciassi, Dario, Siciliano (TBC), ...</td>
<td>Ethics, Legal, Societal, Economic Issues Roundtable</td>
<td>Research Methodology</td>
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<td>Supervised hands-on</td>
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*About 40h of activities (ECTS?)*