



CONCEIVE DESIGN IMPLEMENT OPERATE

10th International CDIO CONFERENCE

15-19 June, 2014, Barcelona

CDIO Academy awards

Ramon Bragos
CDIO 2014 general chair

Eduard Alarcon
CDIO 2014 general co-chair

Elisenda Bou-Balust
CDIO 2014 Academy chair



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CDIO Academy Track I: project poster exhibition

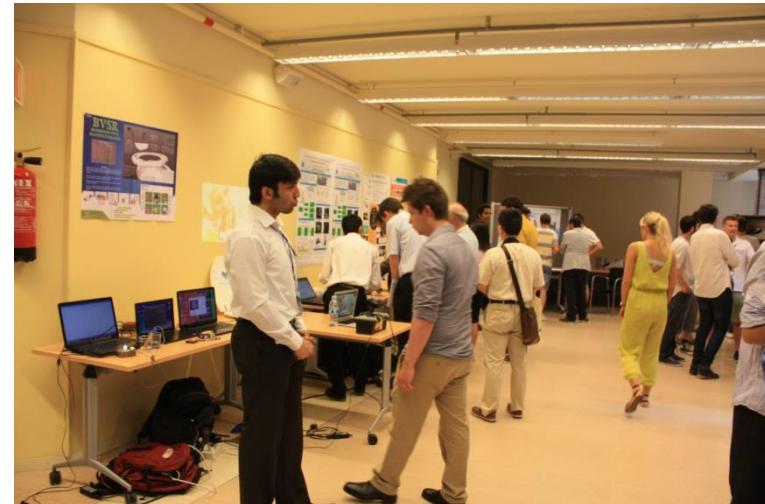
2014 CDIO Academy Teams:

- Environmental Awareness for high risk Professionals, Aston University
- Monitoring hydration levels and general health deterioration in the elderly, Aston University
- RoboShah. Fully self-contained, portable robotic chess, with its own artificial intelligence, ASU, Astrakhan
- Self-propelled defectoscope-crawler machine, ASU, Astrakhan
- Driving simulator for a susstainable future, Chalmers University of Technology
- Creating a virtual platform "Sekhi" by mapping transport systems to facilitate sharing community, Chalmers UT
- Development of an optical engine for Chalmers Vera Team, Chalmers University of Technology
- Silver Suit, Singapore Polytechnic
- Upper Extremity Rehabilitation Device, Singapore Polytechnic
- The project of improvement of the technological process at automobile plant, Kazan Federal University
- Augmented reality on Västankvarn farm with Geo Layer and Layar App, Novia UAS Finland
- Urinary Incontinence Test Bed, University of Liverpool
- Robotic prototype platform development for adolescent innovation, Chengdu UIT
- Design and implementation of simple automatic weather station, Chengdu UIT



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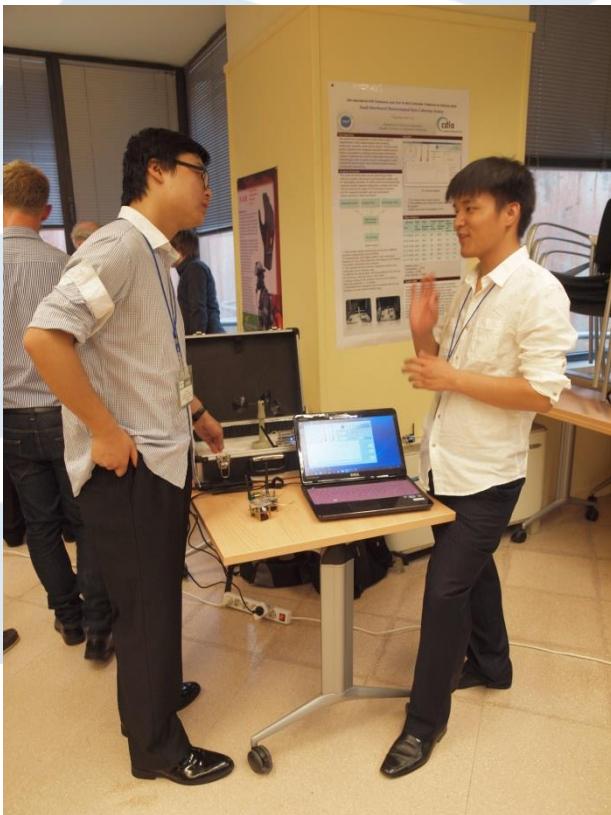
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CDIO Academy award winners

CDIO Academy awards committee:
Clement Fortin (Skoltech)
Rick Sellerns (Queens University)
Svante Gunnarson (Univ. Linköping)
Elisenda Bou-Balust (UPC BarcelonaTech)



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CDIO 2014 Academy award

Basic project category. 2nd award

**Monitoring hydration levels and
general health deterioration in the elderly**

Aston University



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CDIO 2014 Academy award
Basic project category. 1st award

Environmental Awareness for high risk Professionals

Aston University



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CDIO 2014 Academy award
Advanced project category. 2nd award

Urinary Incontinence Test Bed

University of Liverpool



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CDIO 2014 Academy award
Advanced project category. 1st award.

Driving simulator for a sustainable future

Chalmers University of Technology



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CDIO 2014 ACADEMY CUP

Driving simulator for a sustainable future

Chalmers University of Technology



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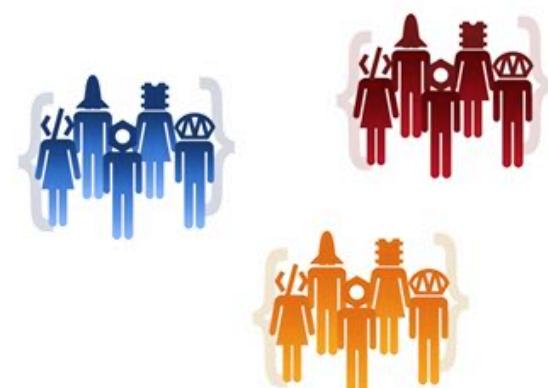
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CDIO Academy Track II: Autonomous Quadcopter



Elisenda Bou-Balust
CDIO 2014 Academy chair

CDIO 2014 Academy Team
Gonzalo Martinez
Carles Carruesco
Carles Araguz
Daniel Rodriguez



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CDIO Academy Track II: Quadcopter

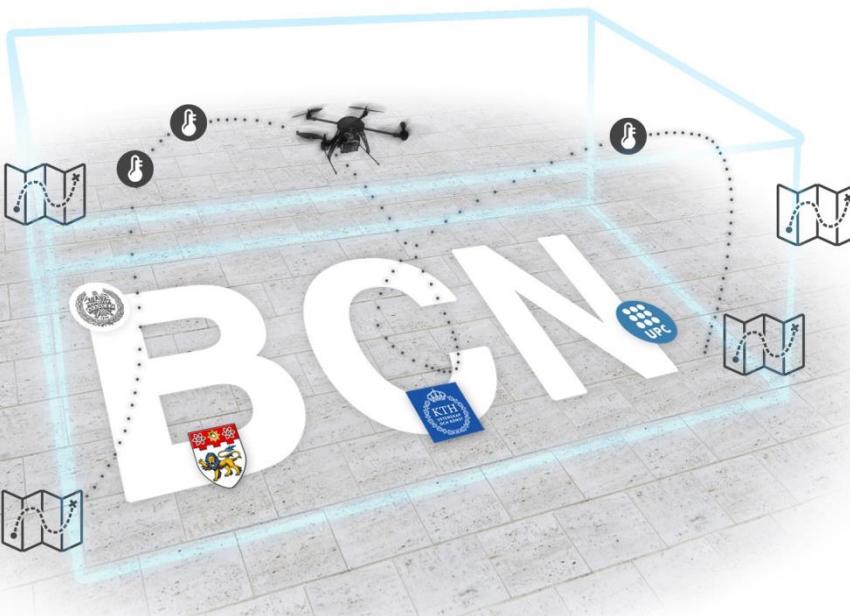
The CDIO 2014 Academy challenge consisted on **integrating an Unmanned Air Vehicle Platform governed by an Android Phone together with an Arduino Sensors Board for its use as an Air-Sensing Engine in Smart Cities.**





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CDIO Academy Track II: Challenge Definition



- Global Picture Challenge: 12pt if the 4 blue corner markers are inside the picture.
- Local Picture Challenge: 11pt per obtained picture ($11 \times 3 = 33$ pt)
- Humidity Challenge: 10pt
- Temperature Challenge: 10pt
- CO Challenge: 10pt
- NO₂ Challenge: 10pt
- No Battery Depletion: 5pt
- Best Mission Time: 5pt are awarded to the team with best mission time.



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CDIO Academy Track II: Quadcopter





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CDIO Academy Track II: Quadcopter



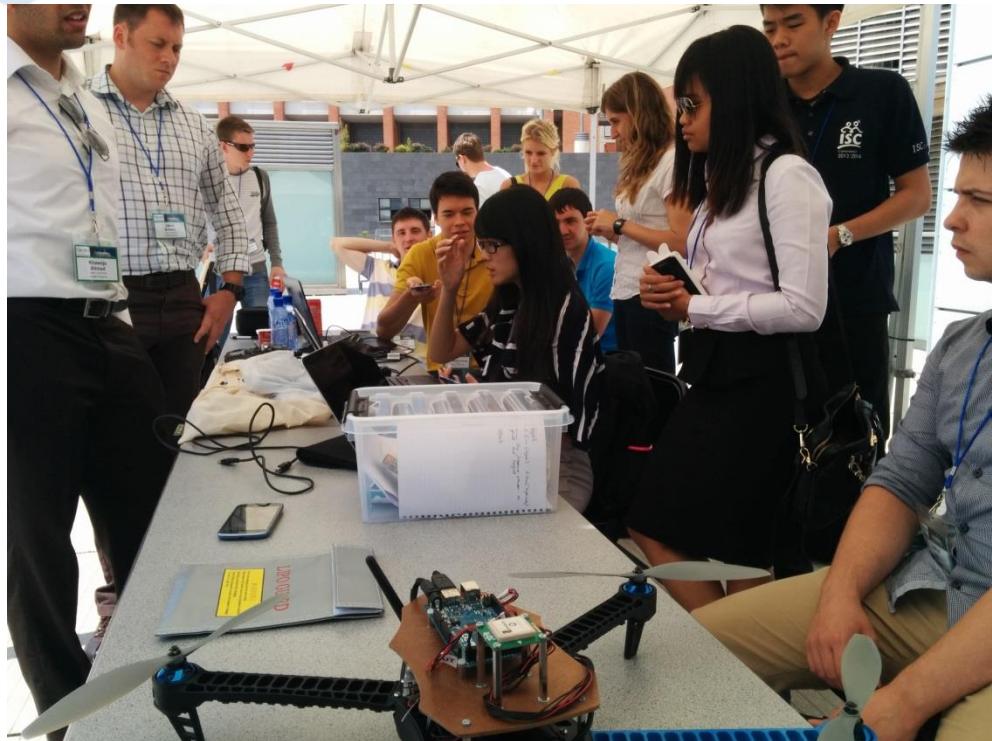
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CDIO Academy Track II: Quadcopter





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CDIO 2014 Academy award
Quadcopter contest category. 1st award



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