

Computational Intelligence in Humanoid Robotics 2012

Prof. [Jacky Baltes](#)
Department of Computer Science
University of Manitoba
Winnipeg, MB
Canada, R3T 2N2

Important Dates

13th January 2012:	Registration Deadline
20th February 2012:	Late registrations
20th - 24th February 2012:	Winter school

Introduction

We are pleased to call for participation in the 2012 IEEE Computational Intelligence Society Winter School on Computational Intelligence in Humanoid Robots, a unique opportunity for you and your students to learn the fundamentals and get involved in humanoid robots - a hot topic for both professional researchers as well as hobbyists. The winter school will also highlight the most recent advances in humanoid robotics research.

This winter school session targets a wide audience from all aspects of robotics research including university faculty, graduate and undergraduate students as well as high school teachers, students, and hobbyists. We also welcome participants from industry.

There will be sessions covering the basic theory and lab activities covering the practice of humanoid robotics. The lecture material and exercises are tailored to match their skills and interests. Practical exercises will be using the Robotis DARwIn-OP humanoid robot, the latest and most advanced humanoid robot.

Each day will consist of a morning and afternoon session. Each morning and afternoon session will contain two 1.5 hour sessions. The first session will consist of a general topic on humanoid robotics, such as active balancing, human-robot interaction, or motion planning. In the second session attendees will have a choice of covering more detailed issues with the lecturer, or to go through a hands-on lab with real humanoid robots to build and learn.

The organizers also plan several social activities and open discussion sessions which will allow participants to network, form new friendships, and hopefully seed future collaborations.

Registration

Application to the winter school will require the submission of a registration form with all relevant demographic and research interest content. The registration forms will be due by Jan 13th 2012.

For more information about the registrations, please contact [Jacky Baltes](#)

Registration fees for the course are as follows:

University Faculty, Industry	\$350
Graduate/Undergraduate students	\$100
High School Teachers/Students	\$10

We intend to make the winter school accessible to as many people as possible for the lowest cost. A number of scholarships and registration waivers will be provided to students that would like to attend the event.

The fees will cover:

- Admission to all sessions and labs
- Lecture materials
- Small gifts from Tourism Winnipeg
- Coffee breaks and snacks
- Social event

Location

The University of Manitoba will host the winter school. Lecture sessions and practical labs will be conducted in the Engineering and Information Technology (EITC) complex as well as the Autonomous Agents Lab and the Human Robot Interaction lab at the University of Manitoba.

Winnipeg is the capital city of Manitoba and is easily accessible by air. Winnipeg's international airport provides many connections to the U.S.A and the rest of Canada. Even though the continental climate in Winnipeg makes winters very cold with temperatures dropping below -20 degrees Celsius regularly, Winnipeg has beautiful blue skies and a great winter landscape. Participants that bring warm clothes can enjoy this scenery. The dates of the winter school coincide with the [Festival du Voyageur](#), a unique celebration of Canada's roots which allows visitors to experience Native, French, and English heritage.



Winter view of the University of Manitoba Administration Building	Opening ceremony of Festival Du Voyageur
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Speakers

- Prof. Kim Jong Hwan – KAIST, Daejeon, South Korea
- Prof. Tu Kuo-Yang - NKFUST, Kaohsiung, Taiwan
- Prof. Daniel Lee - University of Pennsylvania, U.S.A. (To be confirmed)
- Prof. John Anderson - University of Manitoba
- Prof. XXX (To be confirmed)
- Prof. James Young - University of Manitoba
- Prof. Jacky Baltes - University of Manitoba
- Prof. Christine Wu - University of Manitoba

Estimated Attendance

We expect about 40 - 50 faculty, 20 undergraduate and graduate students, 10 - 20 teachers, and 20 - 30 high school students. In total, we expect 90 to 100 participants.

Sponsors

- Department of Computer Science, University of Manitoba
- Faculty of Science, University of Manitoba
- Faculty of Engineering, University of Manitoba
- Autonomous Agents Lab, University of Manitoba
- Human Robot Interaction Lab, University of Manitoba
- Robotis, South Korea
- Tourism Winnipeg, Winnipeg, Manitoba

Proposed Schedule

Time	Monday	Tuesday	Wednesday	Thursday	Friday
9:00 – 10:30	Registration	Plenary Session 1	Plenary Session 1	Plenary Session 1	Plenary Session 1
10:30 – 10:45	Registration	Break	Break	Break	Break
10:45 – 12:00	Registration	Plenary Session 2/ Robot Lab	Plenary Session 2/ Robot Lab	Plenary Session 2/ Robot Lab	Plenary Session 2/ Robot Lab
12:00-1:30	Lunch	Lunch	Lunch	Lunch	Closing
13:30-15:00	Introduction/ Keynote	Plenary Session 3	Plenary Session 3	Plenary Session 3	
15:00-15:15	Break	Break	Break	Break	
15:15-16:45	Plenary Session	Plenary Session 4/ Robot Lab	Plenary Session 4/ Robot Lab	Plenary Session 4/ Robot Lab	

18:00 - 21:00		Festival Du Voyageur		Farewell Dinner	
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Social Program:

1. Visit to the Festival Du Voyageur, tentatively planned for Tue., Feb. 21st, 2012
2. Farewell Dinner at the Forks, Thu., Feb 23rd, 2012.

Directors:

Prof. Jacky Baltes,

University of Manitoba,

Winnipeg, MB,

Canada, R3T 2N2

jacky@cs.umanitoba.ca

Prof. Tu Kuo-Yang

National Kaohsiung First University of Science and Technology

Kaohsiung,

Taiwan, R.O.C.

Local Chair:

Prof. Rasit Eskicioglu

University of Manitoba

Winnipeg, MB

Canada, R3T 2N2

rasit@cs.umanitoba.ca