

# 2015 IEEE INTERNATIONAL HUMANITARIAN TECHNOLOGY CONFERENCE



OTTAWA, CANADA  
MAY 31 – JUNE 4, 2015



## STUDENT COMPETITION

1ST, 2ND AND 3RD PRIZE WINNERS WILL BE AWARDED FOR EACH COMPETITION

### STUDENT PAPER COMPETITION

2015 IEEE IHTC INVITES YOU TO SUBMIT AN ABSTRACT OF 200-300 WORDS ON A PAPER DEMONSTRATING A LINK TO THE CONFERENCE THEME IN ANY OF THE FOLLOWING TRACK AREAS:

- Technologies to assist in disaster mitigation, relief, and recovery
- Humanitarian supply chains in preparedness, response, and rehabilitation for aid and relief
  - Connectivity and communications technologies
  - Psycho-social factors facilitating the effective use of technology
    - Technologies for water and sanitation
    - Forensic technologies for disaster and relief operations
  - Mobile health (mHealth), medical technology, and telemedicine
    - Social media for building resilience
- Data and personal security technologies for humanitarian and development applications
  - Off-grid power, renewable energy, and resilient power grids
- Humanitarian and/or sustainable engineering programs, educational technologies, course materials, and curricula
- Community engagement and social and economic factors in humanitarian engineering
  - Food security, micro-farming, and urban agriculture

Deadline for abstract submission:

**February 28, 2015**

Notification of abstract acceptance:

**March 9, 2015**

4-page full paper (in IEEE format) due:

**March 23, 2015**

Reviewer's feedback to authors:

**April 27, 2015**

Camera-ready papers and copyright forms due:

**May 10, 2015**

#### FOR MORE INFO:

[ihtc.ieee.ca](http://ihtc.ieee.ca)

#### MIT RADAR DESIGN REFERENCE:

Charvat, Gregory, Jonathan Williams, Alan Fenn, Steve Kogon, and Jeffrey Herd.

*RES.LL-003 Build a Small Radar System Capable of Sensing Range, Doppler, and Synthetic Aperture Radar Imaging,*

January IAP 2011.

(MIT OpenCourseWare: [ocw.mit.edu](http://ocw.mit.edu))



### STUDENT PROJECT COMPETITION

#### DEVELOP AN ADD-ON MODULE FOR THE MIT RADAR PROTOTYPE:

- A DAQ FOR TRIGGERING THE RADAR AND STORING THE DATA, OR
- AN IMU MODULE FOR MEASURING AND DATA LOGGING THE INSTANTANEOUS PHYSICAL POSITION AND ORIENTATION OF THE RADAR WHILE IT TRAVERSES ALONG A SUSPENDED ZIP-LINE, OR
- A VERY LOW-COST AND EFFICIENT WIDE-BAND TX/RX DIRECTIVE ANTENNA PAIR TO REPLACE THE CANTENNAS IN THE ORIGINAL RADAR PROTOTYPE

**PROTOTYPES TO BE READY FOR DEMO BY THE TIME OF THE IHTC CONFERENCE (MAY 31 – JUNE 4, 2015)**

**SUBMIT AN ABSTRACT ON THE PROJECT BY NOVEMBER 30, 2014**