



IEEE CRFID

EDUCATIONAL MEGA-CHALLENGE

2 0 1 8

To engage and interest **undergraduate** and **graduate students** and their **advisors**, the IEEE Council on RFID (CRFID) is offering a competition that addresses real-world problems and is:

- Open to any accredited, degree-program educational institution
- Composed of teams with at least one IEEE student member and at least one advisor who is an IEEE member



2017 Mega-Challenge Champion University of Macau's presenter Miss Wan-lan Lou

2018 CHALLENGE: SMART CITIES

Like the 2017 challenge, the 2018 challenge focuses on the use of radio frequency identification **RFID** in **Smart Cities**. Teams will be rated on how they plan and evaluate a solution that incorporates RFID technology and systems. Teams are asked to prepare as if responding to a request for proposal (RFP).

- The team will choose a city and a problem it faces that can be addressed by a smart city solution (e.g., traffic flow, mass transit, infrastructure support, revenue collections, parks management, etc.)
- The team will identify a solution that includes the use of RFID.

For support from the **RAIN RFID Alliance**, passive UHF RFID must be included in the solution.

- The team will identify the steps needed to implement the solution.
- Submissions must include:
 - Problem statement
 - Proposed solution
 - Differentiator (why this solution vs. others)
 - Resource summary (Personnel and equipment)
 - Team summary – bios, function
 - 3-minute video presentation

DEADLINE: JANUARY 15, 2018

Judges from IEEE CRFID, the RAIN RFID Alliance and RFID Journal will select the top three teams to present at the IEEE RFID 2018 conference at the RFID Journal Live! event in Orlando, Florida in April, 2018. Up to \$5,000 (USD) student travel support is available from IEEE CRFID and the RAIN RFID Alliance. Alliance members will prep presenters whose solution uses passive UHF. When applicable, projects will be demonstrated at RFID Journal LIVE!

RFID JOURNAL
THE WORLD'S RFID AUTHORITY

<http://rfidjournal.com>

RAIN RFID

<http://rainrfid.org/>



www.facebook.com/IEEECRFID



www.twitter.com/IEEECRFID



<https://www.linkedin.com/groups/3535541>



<http://www.ieee-rfid.org/>

CRFID MEMBER SOCIETIES:



For more information, please contact: megachallenge@ieee-rfid.org



The newest addition to IEEE's assemblage of technical societies, the Council on RFID or CRFID provides a focus for RFID technology across the technical spectrum of IEEE. Comprising 15 member societies, CRFID's goal is to EDUCATE about the theory and practice of matters relating to RFID (radio frequency identification) and RFID-related systems. These systems have demonstrated significant impact in healthcare, retail, transit, automotive, payments, security and logistics applications, quick retrieval of unique identifiers in real-time asset location, and many other areas.

IEEE CRFID offers:

Conferences, workshops and tutorials Technical Committees

- Blockchain, Chair: Dr. Yong Yuan - yong.yuan@ia.ac.cn
- Food Engineering, Chair: Prof. Antonio Rizzi - rzzntn@gmail.com
- Internet of Things, Chair: Dr. Jun Jason Zhang - Jun.Zhang@du.edu
- Smart Materials, Chair: Dr. George Xiao - George.Xiao@nrc-cnrc.gc.ca
- Wireless for Space and Extreme Environments,
Chair: Prof. Ali Abedi, ali.abedi@maine.edu

Also

- Standards, Regulatory, and Business for RFID
- Circuits Systems for RFID Systems
- Cyber-Physical Systems
- Signal Processing for RFID Systems
- Security and Reliability for RFID Systems

Distinguished Lecturers

Sample topics:

- The Impact of RFID / RTLS in Healthcare, Enhancing Patient Care and Optimizing Workflow and Business Processes
- Wireless power transfer and energy harvesting for RFID
- Biometric RFID/NFC Security Systems expanding the Department of Defense and Corporate Security for the 21st Century
- Energy Harvesting: Expanding the Range of Portable Power
- Security and Privacy in an Internet of Things World
- Wireless Forever: Engineering the Radios that Never Plug-in
- Inkjet-/3D-Printed Nanotechnology-enabled Wireless Communication
- Sensing and RFID Modules for Internet of Things,
- "Smart Skin" and "Zero-Power" Applications

Periodicals

- RFID Virtual Journal (free to member societies) Curated selection of papers from IEEE's trademarked digital library xPlore.
- Journal on RFID
- Newsletter



Scan this QR code with your smart phone for the **RFID Virtual Journal**



IEEE Members scan this QR code with your smart phone to **join our growing RFID community.**



www.facebook.com/IEEECRFID



www.twitter.com/IEEECRFID



<https://www.linkedin.com/groups/3535541>



<http://www.ieee-rfid.org/>

For additional information on the IEEE Council on RFID, please visit us at: www.ieee-rfid.org



IEEE

