Mini Conductor

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IEEE Dayton Section Meeting

May 28, 2014 6:30pm

Join Us!

4801 Springfield Street
In the Montgomery County Education Service Center

Join us for a guest presentation!

All Welcome! No Charge

Two of Professor Mary Lanzerotti's students have completed their IEEE Women in Engineering Education study and will present their results as part at the May meeting. She and her students conducted this study as part of IEEE's education history program.

Join us to learn more about:

Oral Histories of Distinguished Female Leaders: Inspiring the Next Generation of Young People in Science, Technology, Engineering, and Mathematics (STEM)

Check out the new Dayton Section Website

The new address is
http://sites.ieee.org/dayton/

Several members of the Dayton Section have worked hard to migrate the section website to the new Wordpress-based format. It has more features and will be easier for multiple members to update. The old web will be phased out in the near future. Take a look!

2014 IEEE Radar Conference (RadarCon)
May 19-23 Cincinnati, Ohio

http://www.radarcon2014.org/

IEEE sponsors: Aerospace & Electronic Systems Society,
Antennas & Propagation Society, Signal Processing Society

The Dayton-Cincinnati area is rich with aerospace heritage and provides a one-of-a-kind backdrop for RadarCon. The 2014 IEEE Radar Conference will showcase innovations and developments in radar technology. Topics will include presentations describing developments in radar systems and their implementations, phenomenology, target and clutter modeling, signal processing, component advances, etc. Advances from several disciplines have contributed synergistically to improve radar performance. However, onerous challenges imposed by harsh environments, difficult targets, and a shrinking EM spectrum correspondingly increase the demands on radar performance in terms of multi-functional and multi-modal requirements. This in turn calls for innovative approaches that enable exploitation of the inherent information from the radar returns, reflected in our conference theme FROM SENSING TO INFORMATION

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Just Announced!

An Additional Plenary Speaker for IEEE National Aerospace & Electronics Conference

Dr. Anirban Bandyopadhyay

National Institute of Material Science, Tsukuba City, Japan

He will present: *"Computing with organic brain jelly: creating loops of rhythms to avoid software programming"*

Abstract: The potential of pattern-based computing was never explored to the fullest. Scientists have always tried to look for the computing constructs that would lead to logical operation. We created the smallest molecular neural network, a nano-molecular wheel , with glia-inspired circuiting, and then a cellular automaton- based massively parallel computing on the organic molecular layer. We realized that neither computing construct helps us to generate bio-inspired computing, nor the analogue pattern formation similar to a particular physical phenomenon. We then started building "brain jelly," which is an organic molecular machine that replicates a particular electromagnetic rhythm of oscillations throughout its structure. This is exactly what our brain does: it encodes a particular resonant vibration loop in terms of its neural circuitry. We observe that the brain jelly encodes multiple rhythms in a simple set of materials. We use this particular structural behavior to encode and retrieve complex sets of arguments within a finite time, which cannot otherwise be solved by computer within a time less than the age of this universe, even using the most powerful exascale (10^18 bits per second) supercomputer. When we follow this particular approach, the Turing tape appears like a fractal network, a never ending process, which means such a reconfigurable hardware cannot be classified as a Turing machine. The entire machine has only one tape and the solution is sent by a "spontaneous reply back", hence we can perform searching without a search in this hardware.

2014 IEEE Conference on Computer Vision and Pattern Recognition (CVPR)

20 Jun - 27 Jun 2014
Columbus Convention Center, Columbus, OH, USA

http://www.pamitc.org/cvpr14/

Sponsors

CVPR is the premier annual Computer Vision event comprising the main CVPR conference and several co-located workshops and short courses. With its high]quality and low cost, it provides an exceptional value for students, academics and industry researchers.

Main Conference:	June 24-27, 2014 (4 days!)
Workshops/Short Courses:	June 23, 28, 2014

IEEE National Aerospace & Electronics Conference (NAECON)

25-27 June, Dayton, Ohio

Abstract Due: May 20, 2014 Paper Due: June 4, 2014
IEEE Member Cost (Early Registration): $200, Student Cost: $100
Submission Details: www.naecon.org

The 2014 National Aerospace Electronics Conference (NAECON) will be held on June 25-27 at the University of Dayton's Research Institute, Conference Center (Meyer Room), 1700 Patterson Blvd, Dayton, Ohio.

The 2014 theme is "Sensory Processing"

NAECON is a major forum for researchers, practitioners, and students interested in advanced aerospace sensors, navigation, power systems, imaging fusion, advanced materials, RFIC design, collaboration, THz & signal processing, passive and active sensing, cyber and Trust in semiconductor design.

NAECON Grand Challenge's Theme: ***"Sensory Materials & Interfaces to achieve high performance, trust, reliability and improved processing"***

Sponsored by: The Aerospace & Electronic Systems Society (AESS) and The IEEE Dayton Section
Supported by: Air Force Institute of Technology, Wright State University, University of Cincinnati, The Ohio State University, University of Dayton, and Oakland University

NAECON Keynote Speakers

Wednesday – 25 June

Vic Bonneau,
President GE Aviation Electrical Power Systems Design and Controls

Thursday-26 June

Dr. Michael Barnsley,
Department of Mathematics, Australian National University, Canberra, Australia

Topic*: V-Variable Fractals and Superfractals: Modeling a wide range of Phenomena across Science and Technology*

Friday- 27 June

Dr. Jade Morton,
Miami University

Topic: *High Sensitivity for Integrated Navigation Information Satellite Systems*

NAECON Plenary Speaker

Thursday -26 June,

Dr. Harold Weinstock, AFOSR
Topic: What Quantum Electronics Solids Can Do for Aerospace Electronics

Projects: Tec^Edge, IDCAST, Great Lakes Photonics Symposium:

Student Projects , STEM activities, & Photonics (Chairs: Dr. Robert Williams & Larrell Walters, and Dr. Paul McManamon)

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