



## Mark Your Calendar

### Miami Valley Consultants Network Meeting

Friday, October 11, at the Engineers Club of Dayton, at 11:30 AM.

Please make reservations at 937-228-2148.

### Dayton Section Meeting

Wednesday October 16th at 6pm  
ASC building

For more info—contact Stephen L. Hary, PhD,  
Secretary, Dayton Section  
[stevhary@ieee.org](mailto:stevhary@ieee.org)

### Computer Society Meeting Big Data, Big Data Quality Problem

Tuesday, October 22 11:30—12:30

### IEEE Fall Lecture Series

#### Computational Intelligence

November 5 11:00am-1:00pm  
More Info on Page 3

### The Desch Award & IEEE Contribution Award

November 5 6:00pm—  
More Info on Page 3



## NAECON 2014

### June 25 - 27, 2014

Location: Holiday Inn, Colonel Glenn Hwy,  
across from Wright State Univ.  
Call for abstracts & papers in Spring 2014

## IEEE computer society

# Big Data, Big Data Quality Problem

Join Us!

**SPEAKER:** Dave Becker – The MITRE Corporation  
**DATE:** Tuesday, October 22, 2013 (4<sup>th</sup> Tuesday this month)  
**TIME:** 11:30-12:30 PM  
**PLACE:** InfoSciTex  
4027 Colonel Glenn Hwy, Suite 210 Dayton, OH  
45431-1672

Just West of intersection with National Rd/Grange Hall Rd, in Signal Hill TechneCenter (building 4027 is the left-most of the 3 buildings)

**RSVP:** Dave Perez, [david.c.perez@gmail.com](mailto:david.c.perez@gmail.com) or (937) 904-5486. Pizza provided for \$3/person (bring your own drink) - RSVP (Name, e-mail, phone, citizenship, IEEE member? Computer Society member?, pizza?) required. **Meeting open to all.**

### ABSTRACT:

Big Data applies to data sets of extreme size (terabytes, petabytes, exabytes and zettabytes) that are beyond the ability of manual techniques and commonly used software tools to capture, manage, and process within a tolerable elapsed timeframe. We assume Big Data will be prone to the same quality problems that plague traditionally-sized data sets, characterized by accuracy, precision, completeness, consistency, timeliness, lineage, and relevance. However, these quality dimensions are not yet well understood for Big Data, and may be very different, i.e., may require completely different strategies and tools for profiling, measurement, assessment and action processing. This briefing provides an overview of the initial findings from a survey being conducted by the MITRE Corporation of a diverse set of primarily government Big Data initiatives in order to gain a better understanding of the specific data quality problems typically being encountered with Big Data. The Big Data Quality case studies will include literature surveys, in-depth interviews with initiative experts & SMEs, and exploratory data profiling, measurement and assessment regarding Big Data Quality issues, tools and techniques. From these case studies (and a Data Quality Framework from prior MITRE research), we evolve a new Big Data Quality Framework for use in data management of current and future Big Data initiatives.

## Dayton Section Officers 2013

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**IEEE Fall Lecture Series November 5 11:00am-1:00pm**Topic: **Computational Intelligence**

Where: Engineers Club "Barn Gang" Luncheon, 110 E. Monument Ave, Dayton

Speaker: Dr. Jacek Zurada, University of Louisville



Background: Dr. Zurada, IEEE Fellow, has been a Distinguished Speaker of IEEE CIS. He wrote a groundbreaking book in the fields of neural networking and computational intelligence. He will address applications in data mining, image processing and biomedicine. More information: email Debbie Anderson at [debanderson@donet.com](mailto:debanderson@donet.com)

**Historical Background on the "Barn Gang":** The "barn" was a real barn on Central Avenue in Dayton where Col. Edward Andrew Deeds and Charles Kettering arguably kickstarted modern motoring and helped birth what was then DELCO — Dayton Engineering Laboratories Co. Together with other technically inclined minds, the "gang" tinkered with what became the electric cash register and other inventions. A replica of the barn can be found at Carillon Park.

In the years following the Great Flood of 1913, Deeds and Kettering founded the Dayton Engineers Club on East Monument Avenue in full view of the Great Miami River, evidently confident in the Miami Conservancy District's flood prevention plans. Aviation pioneer Orville Wright was a club member for 34 years. Decades later, in the early 1990s, club members resurrected the idea of the Barn Gang, in spirit if not in a literal barn. They met every Tuesday for lunch and talked over technical and engineering problems, but also history and business issues.

**2013 Joe Desch Innovation Award and IEEE Wright Brothers Award****November 5 6:00pm-**

Where: Engineers Club, 110 E. Monument Ave, Dayton

This year the 2013 Joe Desch Innovation Award and IEEE Wright Brothers Award will be presented on Tuesday to Jacek Zurada, University of Louisville, and Les McFawn, Wright Brothers Institute. The Desch Innovation Award is given to pioneers or ground-breakers in digital technology, and information sciences. The IEEE Wright Brothers Award is for significant outstanding achievement by the IEEE USA Society Geographic Activities Committee

**Attendance is Open to members, non-members and guests But you MUST PRE-REGISTER by emailing your name and the number of people in your party to IEEE Secretary: Stephen Hary 528-8727 [stevehary@ieee.org](mailto:stevehary@ieee.org) before 1 November. You may pay at the door.**

**Agenda**

6:00pm	Reception	
7:00 pm	Buffet dinner (\$28.00 per member/ \$10.00 per student)	
7:45pm	Debbie Anderson will introduce and present the award to Dr. Zurada	
8:15pm	Felicia Harlow & Dr. Ewing will introduce the Tec^Edge Award and present the award to Les McFawn	

**Background on the 2013 Joe Desch Innovation Award.** This award is named for the Daytonian who during World War II designed innovative analytical equipment for the US Navy. His designs and products enabled the Allies to read encrypted enemy communications, from September 1943 and beyond. In that spirit, this award recognizes those who have worked in the-expanding frontiers of digital and information sciences and allied technologies. Ms. Debbie Anderson ("Desch") has enabled this award and led encryption activities in the Dayton area for the last 10 years.

**Dayton Code Breakers-** During WWII, within the NCR company in Dayton, Ohio, a laboratory was setup to design and build codebreaking machines (one machine picture above). This project was top priority and top secret. The Navy came to NCR because of an NCR engineer named Joe Desch, who previously had graduated from the University of Dayton in Electrical Engineering. The speed of the encryption "tube" device switches in this machine were roughly 100X greater than any commercial product in the 40's and led the field of computing decades before the "known" commercial computers by the NAVY were developed.

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## Free Student Professional Awareness Conference (SPAC) October 30th at University of Dayton!

**from 5:30 - 8:00 PM at the University of Dayton**

The University of Dayton chapter of IEEE encourages you to attend the upcoming Student Professional Awareness Conference (SPAC). Highlights of this SPAC include technical talk lead by the PEAL Society, a nationally renowned IEEE speaker Mr. Jim Watson, and a Professional Panel Session for students have open Q&A with engineers from Government and Industry.

Additionally, students who attend this SPAC will have an opportunity to sign up for an exclusive tour of the new EPICENTER facility!

**Admission, beverages, and dinner for students is free!**

This SPAC is made possible by the PEAL Society, IEEE Dayton, and GE Aviation. If you are interested in attending, please contact the University of Dayton IEEE Chapter President, Mr. Devin Spatz, via email at [spatzd1@udayton.edu](mailto:spatzd1@udayton.edu)

