

Paulson, Jeff (STP)

Subject: REMINDER: IEEE I&M February Meeting (Feb. 16, 2012, 4-6PM)



Twin Cities Chapter

Meeting Notice

(attendance is *free*—Non-Members are *Welcome!*)

When:

Thursday, February, 16, 2012
4:00 – 6:00PM

Where:

PaR Systems, Inc.
707 County Road E West
Shoreview, MN 55126
www.par.com

PRESENTATION:

“ROBOTIC ACCURACY MEASUREMENT AND CALIBRATION”

PRESENTED BY:

Thomas E. Marrinan - Engineering Fellow, Lead Systems Engineer, PaR Systems, Inc.
Come Rene-Bazin – Program Manager, PaR Systems, Inc.

About our Host:

PaR Systems provides automation systems and material handling equipment and systems for a variety of highly specialized industries including: Aerospace, Department of Energy, Food and Beverage, Heavy Construction, [Laser Technology](#), Life Sciences/Medical Manufacturing, Semiconductor, Defense, Government, Hazardous Material Management, Industrial Manufacturing, Marine, Ship Building/Ship Yards. With thousands of automation systems and material handling equipment installations around the world, PaR Systems provides standard products and custom equipment using a broad range of mechanical platforms and extensive software libraries and control systems expertise.

About the Presenters:

Mr. Marrinan has 27 years of design and project management experience. He oversees the design of custom rigid robot structures for material handling, material removal, and large part inspection, with experience in design and integration of special processes tooling and systems. Integration of specialty tooling includes intelligent drills, routers, waterjets, tactile probes, non-destructive inspection probes, and grippers. He is a specialist in robot metrology, developing techniques for measuring and enhancing the accuracy of PaR's robots. Mr. Marrinan has authored papers relating to robot design, and accuracy and he shares three patents in this area and has at least three more pending. Graduating from the University of Minnesota with a BSME in 1983, he joined PaR Systems. He also holds a BA in Biology from St. John's University.

Mr. Rene-Bazin has 13 years of design and project management experience. As part of his role as Program Manager for PaR Systems, he is responsible for the development and sales of drilling and trimming robotic systems in the aerospace industry. Mr. Rene-Bazin holds one pending patent. Graduating from the Université de Technologies de Belfort Montbéliard in France with a Bachelor degree in System Design in 1998, he joined PaR Systems in 2001, after three years working for Dassault Aviation in France. In May, he will be finishing an executive MBA from St Thomas University.

About the Presentation:

The presentation highlights the sources of machine error encountered when building large scale gantry robotic systems and the compensation techniques used to ensure the machine accuracy. It details a brief history and demonstration of the measurement tools and techniques. Finally, the discussion describes advanced statistical methods and real time compensation being investigated for increasingly demanding applications.

Food and Refreshments:

Sandwiches, snacks, cookies and beverages will be provided.

Directions to PaR Systems:

From 694 take the Victoria Street exit and head south.
Turn left at the fire station onto County Road E.
Take the second left turn into PaR's parking lot.
Park and come to the front door.

AGENDA:

Food/Networking	4:00 PM
I&M Business	4:15 PM
Presentation	4:30 PM
Tour/Demo	5:15 PM
Adjourn	6:00 PM

PLEASE R.S.V.P!!

Please RSVP for this meeting.

PLEASE NOTE: PaR has also asked for a list of foreign nationals who will be attending. If this applies to you, please provide your nationality along with your name.

Jeff Paulson (651) 582-4076

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Our Mailing List:

Contact Jeff to be added, for changes, or to be removed.

Web Sites:

Instrumentation and Measurement Chapter:

<http://www.im.tc-ieee.org>

Twin Cities Section:

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