

### Thursday, October 22, 2015 Arlington Convention Center, Arlington, Texas

Brought to you by IEEE Fort Worth Section





Keynote Speaker, Dr. Tucker Balch is an associate professor in the School of Interactive Computing at Georgia Tech. He also serves as Chief Technical Officer and Co-Founder of Lucena Research, Vice-President and Member of the Board of Trustees of the RoboCup Federation, and President of Georgia Robotics, Inc. Tucker is a Distinguished Graduate of USAF Pilot Training and a recipient of the National Defense Service Medal. He is author or co-author of over 200 papers and presentations with more than 9700 citations. His current and prior research interests cover 3-D machine vision, multiple interacting target tracking, communication and control in multi-robot teams, and distributed sensor fusion.



Plenary Speaker, Dr. Don Kinard, Senior Technical Fellow for Lockheed Martin Aeronautics Production Operations, established the F-35 Fighter Production System to manage production line transition from the early 1 aircraft per month production rate to a 20 aircraft per month production rate. Before joining F-35 in 2004, Don held various positions in both Engineering and Manufacturing on the F-22 Program including Composite Risk Reduction Lead, Covers and Mate Integrated Product Development Team Lead, Engineering Lead for Production Support, and Deputy Director of F-22 Production. Don also leads the Corporate Fellow's Manufacturing Team tasked to share manufacturing technologies and lessons learned

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	Emerging Technologies	Software and Systems Engineering	Developing and Deploying Secure Systems	Power and Energy	Computational Intelligence	Biotechnologies	Financial and Professional Development	
7:30	Welcome Address: Diane Bowen Collier, IEEE MetroCon 2015 General Chair							
7:45 - 8:25	Plenary Address: Advanced Manufacturing and the F-35 Lightning II  Don Kinard, Senior Technical Fellow, Lockheed Martin Aeronautics Company							
8:30 - 9:25	IOT Security & Communications Protocol Gurvinder Ahluwali IBM	<b>Demystifying Information Fusion</b> Tom Frey Lockheed Martin	Oracle RAC Clusters for Resiliency Against Attacks Louis Gonzales Lockheed Martin	Distributed Generation Surya Santoso UT Austin	Concepts in Computational Reasoning Dale Boren DWB Innovations	Cellular Puripotency: from Cell Biology to Translational Research Yu-chieh "Jack" Wang UNTHSC	Networking for Introverts Abby Kohut Staffing Symphony	
9:25- 9:55	Break - Student Poster Presentations The Student Poster Competition is open to IEEE Student Members who are either undergraduate or graduate students at the time of the competition							
10:00- 10:55	Cloud Analytics Melvin Greer Lockheed Martin	Top 10 Features of C++11 Price Granger Jose Cruz Lockheed Martin	Secure Data Center in a Box Ken Williams Lockheed Martin	<b>Big Data</b> Yu Meng Oncor	DARPA PLINY: Self- Completing Software Research at Ken Kennedy Institute Vijay Murali Rice University	The Application of Microfluidics in Cell Biology Vinay V. Abhyankar UTARI	Building Your Financial Foundation Tyler Davis Merrill Lynch	
11:00 - 11:55	3-D Printing Technologies and Applications Adam Cohen SMU	Introduction to Safety in Software-Intensive Systems Dennis Frailey SMU IEEE Guest Lecturer	Industrial Control System Applications Go Mobile in the Cloud Jeff Daniels Lockheed Martin Ben Armaba, IBM Corp. Arman Sargolzaei PLC International Inc.	PMU Based Dynamic Equivalent Model Development for Large Scale Wind Farm Wei-Jen Lee UT Arlington	Cognition and Learning in Autonomous Robot Systems Manfred Huber UT Arlington	Biomaterial Design and 3D Printing for Controlled Drug Delivery Xiaohua Liu Texas A&M / Baylor	The Hidden Job Market Abby Kohut Staffing Symphony	
12:00 - 1:15	Luncheon - Keynote Address: Statistical Machine Learning: What It Is and How We Use It for Autonomous Decision Making Tucker Balch, Associate Professor, School of Interactive Computing, College of Computing, Georgia Institute of Technology							
1:15 - 2:00	Exhibits and Networking							
2:00 - 3:10	Cyber Vulnerabilities in Unmanned Systems Andrew Pennington K2Share, LLC	On Teaching Data Mining and Visualization Antonio Sanchez- Aguilar TCU	Security Risk Management: Applying Commercial Practices to DoD Systems Ben Calloni Lockheed Martin	Connecting America's Power Grids Dave Stidham Tres Amigas, LLC	Keyphrase Extraction in Citation Networks Cornelia Caragea UNT	Cell Based Therapy HP802-247- Couldn't Lose, But Did Jamie Dickerson Smith & Nephew	How to Invest, Find New Opportunities, Combat New Risks Tyler Davis Merrill Lynch John Andrews Allianz Global	
3:10 - 3:40	Break in Exhibits Area							
3:45- 4:40	Model Based Engineering and the Internet of Things Barclay Brown IBM	2015: A Year of Service Innovation Charlie Bess HP (Retired)	Vulnerability Assessment Tools: TOIF and BLADE Brittany Bailey Lockheed Martin	Future of the Electric Power System Michael Quinn Oncor	Verification, Validation, and Deployment of Hybrid Neuromorphic Systems Edward L. Safford III Lockheed Martin (Retired)	Nanoparticles for Drug Delivery Xiaowei Dong UNTHSC	Discussing Lessons Shared on 3D Printing (Panel) Floyd Fazi Moderator Lockheed Martin	
5:00 - 7:00		Reception – Sponsored by Merrill Lynch						
Farly	See http:/		for conference inform	ation, student poster	competition rules, a	and on-line registration	on.	

Refund Policy: Requests must be received in writing by October 1st. A withdrawal fee of \$50 will apply. Substitutions are permitted.

<u>Late Registration</u> starts October 2<sup>nd</sup> and will be available on-site beginning at 7:00 am on the day of the conference. For additional information and information on Group Discounts contact Diane Bowen Collier, d.b.collier@ieee.org (please include MetroCon in the email), cell phone (817) 988-5660. Seating for late registration may be limited.

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Fees: Professional IEEE Member Professional Non-Member Students, Life Members, Retirees	\$300 \$360 \$100	\$350 \$420 \$120	
Exhibits Only Additional Banquet Ticket	\$100 \$50	\$100 \$50	



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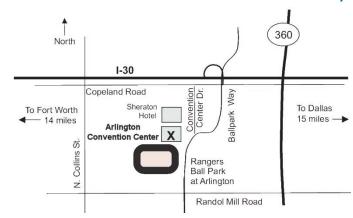


## Presented by IEEE Fort Worth Section



MetroCon 2015 features seven tracks on the latest technology developments in the Dallas/Fort Worth Metroplex. This year's event features an industry exhibits program and a poster competition for area college students.

MetroCon takes place at the Arlington Convention Center located mid-way between Dallas and Fort Worth, immediately off of I-30 in front of Rangers Ball Park at Arlington. From both Dallas and Fort Worth, take the Ballpark Way exit. See map for further directions.



# Patrons 2015:















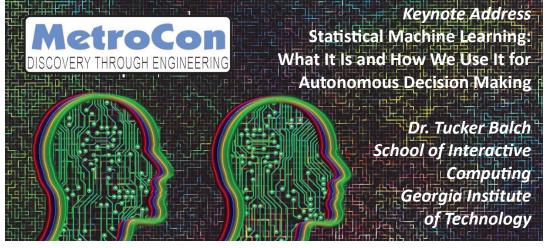












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#### Conference Tracks:

Emerging Technologies • Software and Systems Engineering • Developing and Deploying Secure Systems Power and Energy • Computational Intelligence • Biotechnologies • Financial and Professional Development



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