

## **Kurt L Kosbar**

Electrical and Computer Engineering Department, Number of Years on this Faculty: 25

### **Education**

Ph.D. in Electrical Engineering, University of Southern California, August 1988

Emphasis Area: Communications

M.S. in Electrical Engineering, University of Southern California, May 1986

Emphasis Area: Communications

B.S in Electrical Engineering, Oakland University, May 1982, Summa Cum Laude

B.S in Computer Engineering, Oakland University, May 1982, Summa Cum Laude

### **Academic Experience**

Missouri S&T (S&T), formerly University of Missouri-Rolla (UMR), Associate Professor,

Department of Electrical & Computer Engineering (ECE), Sept. 1996-Present

S&T, ECE, Associate Chair of Laboratory Development, Jan. 1998-Present

UMR, Assistant Professor, Department of Electrical Engineering, Jan. 1989-Aug. 1996

UMR, EE, Associate Chair for Undergraduate Studies, Jan. 1990-Aug. 1996

### **Non-Academic Experience**

Emerson Electric Company / White Rodgers Division, Consultant, Aug 2012 – Jan 2013

Design Manufacturing LLC, Rolla, MO, Consultant, Sept 2012 – Nov 2012

Hughes Aircraft Company, El Segundo, CA, July 1982 – Dec 1988

**Certifications or Professional Registrations** None

### **Current Membership in Professional Organizations**

Institute of Electrical and Electronics Engineers (IEEE)

American Society for Engineering Education (ASEE)

Other: Eta Kappa Nu, Sigma Xi, Phi Kappa Phi, & Tau Beta Pi

### **Honors and Awards**

Missouri S&T Faculty Excellence Award – Teaching (2010)

Miner Alumni Association – Outstanding Advisor Award (2009)

Missouri S&T Commendation for Exceptional Teaching Effectiveness (2008)

Missouri S&T Outstanding Teaching Award (2007, 2006, 2005, 2004, 2003, 2002, 2001, 1999, 1998, 1994, 1993)

UMR School of Engineering Teaching Effectiveness Award (2005)

UMR Dean's Teaching Scholar (2004-2007)

Fulbright Teaching Fellowship – Polytechnic University of Gdansk, Gdansk, Poland, (1996)

UMR-MSM Alumni Outstanding Teaching Award (1994)

UMR Commendation for Exceptional Teaching Effectiveness (1990, 1989)

### **Service Activities**

General Chair, 2013 International Telemetry Conference

University of Missouri System Staff Benefits and Retirement Committee, (2014, 2013, 2012)

University of Missouri System Intercampus Faculty Council (2008, 2007, 2006)  
Missouri S&T Chancellor's Scholarship Committee (2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007)  
Technical Chair, 2009 International Telemetry Conference  
Missouri S&T Faculty Senate, Past President (2008), President (2007), Vice President (2006), Secretary (2005), Parliamentarian (2004)  
Missouri S&T Committee for Effective Teaching (2014, 2013, 2012, 2011, 2010)  
Board of Directors, UMR/USC/Boeing Systems Engineering Program (2002, 2001, 2000, 1999)  
S&T, ECE, Associate Chair of Laboratory Development, Jan. 1998-Present  
UMR, EE, Associate Chair for Undergraduate Studies, Jan. 1990-Aug. 1996  
Missouri S&T, ECE, Scholarship Committee Chair (1997 – Present, 1992-1995)

### **Principal Publications from the Last Five Years**

C. Potter, G. Venayagamoorthy and K. Kosbar, "RNN Based MIMO Channel Prediction", *Signal Processing*, Vol. 90, Issue 2, pp 440-450, Feb., 2010  
K. Kosbar, "Sieci Ad-Hoc, potencjaine mozliwosci I wyzwania", *Przeglad Telekomunikacyjny*, 2009  
J. Hobbs, M. Meye, B. Trapp, S. Tonimous, I. Ayerra, and K. Kosbar, "Telemetry and Command Link for University Mars Rover Vehicle", *Proceedings of the 2013 International Conference on Telemetering*, Las Vegas, NV, October 2013  
J. Jetter and K. Kosbar, "Analysis of a Systems Engineering Based Approach to the University Rover Challenge", *Proceedings of the 2013 International Conference on Telemetering*, Las Vegas, NV, October 2013  
J. Sullivan, A. Coffman, B. Roberds, J. Roberts and K. Kosbar, "Design and Semi-Autonomous Control of a 6-Axis Robotic Arm Used in a Remote Sensing Application", *Proceedings of the 2013 International Conference on Telemetering*, Las Vegas, NV, October 2013  
N. Tramel, J. Dil, H. Almuqallad and K. Kosbar, "Remote Monitoring of Residential Energy Usage", *Proceedings of the 2013 International Conference on Telemetering*, Las Vegas, NV, October 2013  
A. Kulkarni and K. Kosbar, "Study on Novel Routing Protocols for Security of Wireless Sensor Networks", *Proceedings of the 2013 International Conference on Telemetering*, Las Vegas, NV, October 2013  
M. McConnell, D. Chionuma, J. Wright, J. Brandt, L. Zhe, K. Kosbar, "Design of an Autonomous Robot for Indoor Navigation", *Proceedings of the 2013 International Conference on Telemetering*, Las Vegas, NV, October 2013  
J. Anderson, A. Honse and K. Kosbar, "Autonomous Terrain Mapping Using COTS Hardware", *Proceedings of the 2012 International Conference on Telemetering*, San Diego, CA, October 2012  
S. Grott, D. Lecko, R. Parker, N. Price, K. Kosbar and G. Eden, "Telemetry System for Remote Monitoring of Utility Usage in Commercial and Residential Structures", *Proceedings of the 2012 International Conference on Telemetering*, San Diego, CA, October 2012.  
M. Hickie, A. Wilson, J. Kientzy, M. Myers and K. Kosbar, "Design of a Semi-Autonomous Quadrotor Aircraft", *Proceedings of the 2012 International Conference on Telemetering*, San Diego, CA, October 2012. – 1<sup>st</sup> Place Undergraduate Student Paper Prize  
A. Muralidhar and K. Kosbar, "Multiple-Input Multiple-Output System on a Spinning Vehicle with Unknown Channel State Information", *Proceedings of the 2012 International Conference on Telemetering*, San Diego, CA, October 2012.

### **Professional Development Activities**

Fulbright Fellow  
Conference Involvement with IEEE, ITC and ASEE