

Dr. Muhittin Yilmaz

### Education

B.Sc., Electrical and Electronics Engineering, Gazi University, Ankara, Turkey, 1992

M.Sc., Electrical Engineering, Pennsylvania State University, University Park, PA, 1996

Ph.D., Electrical Engineering, Pennsylvania State University, University Park, PA, 2005

### Teaching Interests

Undergraduate courses: Signals, Systems, Control, Computer, Digital Logic, and Robotics Courses

Graduate Courses: Signals, Systems, Advanced Control, Advanced Computer Architecture, and Advanced Robotics courses

### Research Interests

Uncertain, nonlinear, and intelligent system modeling, controller synthesis, and optimization as well as complex interdisciplinary applications, including computer architecture, robotics, and electric systems

### Honors and Awards

“Outstanding Chapter Award”, Eta Kappa Nu Electrical Engineering Honor Society, Faculty Advisor

M. Yilmaz, S. Mujeeb, N. R. Dhansri, “A H-infinity Control Approach for Oil Drilling Processes,” *2013 Complex Adaptive Systems*, Baltimore, MD, USA, November 13-15, 2013, pp. 134-139. **(The conference best ‘Application’ paper 3<sup>rd</sup> Place Award)**

### Selected Publications (up to ten - books, book chapters, journal articles)

R. Ngabesong, M. Yilmaz\*, “Parametric and Linear Parameter Varying Modeling and Optimization of Uncertain Crane Systems,” *International Journal of Dynamics and Control*, Springer, August 2018.

G. K. Allaboyena, M. Yilmaz\*, N. Vaidya, J. Guardiola, “Uncertain Vehicle Lateral Speed Dynamics and Control Frameworks,” in 2018 IEEE International Conference on Electro Information Technology (EIT-2018), Rochester, Michigan, USA, May 3-5, 2018, pp. 655-660.

A. Babb, M. Yilmaz\*, “Quadrotor Electronics and Intelligent Control,” *IEEE Aerosp. Electron. Syst. Mag.*, vol. 32, issue 6, pp. 61-64, June 2017.

S. Adediran, M. Yilmaz\*, “Networked Linear Parameter Varying Control Framework for a Hydro Power Plant,” in IEEE Electro Information Technologies Conference (EIT-2017), Lincoln, Nebraska, USA, May 14-17, 2017, pp.359-362.

M. Yilmaz, N. R. Dhansri, N. Yilmazer, “Convex Beam Synthesis for System-Oriented Noisy and Optimal Antenna Arrays,” *IEEE Antennas Wireless Propag. Lett.*, vol. 16, pp. 509-512, March 2017.

S. Pagadrai, M. Yilmaz\*, P. Valluri, “Smart Grid Backbone Network Real-time Delay Reduction via Integer Programming,” *IEEE Trans. Neural Netw. Learn. Syst.*, vol. 27, issue 8, pp. 1787-1792, August 2016.

A. V. Kamalapur, M. Yilmaz, S. Adediran, "Linear Parameter Varying Modeling and Control of a Nonlinear Power Plant," in *IEEE Green Technology Conference (GreenTech-2015)*, New Orleans, LA, USA, April 15-17, 2015, pp. 162-168.

M. Yilmaz, S. A. Adediran, L. McLauchlan, "Hydro Plant Network Control LPV Framework," in *IEEE International Conference on Systems, Man, and Cybernetics (SMC-2014)*, San Diego, CA, USA, October 5-8, 2014, pp. 3514-3519.

M. Yilmaz, S. Ozcelik, N. Yilmazer, R. Nekovei, "Design-Oriented Enhanced Robotics Curriculum", *IEEE Trans. Edu., Special Issue on Robotics Education*, vol. 56, issue 1, pp. 137-144, February 2013.

M. Yilmaz, H. Liu, "A System-Oriented Convex Beam Synthesis," *2013 IEEE International Symposium on Antennas and Propagation and USNC-URSI National Radio Science Meeting*, Lake Buena Vista, FL, USA, July 7-12, 2013, pp. 858-859.