Sahand University of Technology

Hadi Azmi

Professor

College: Faculty of Electrical Engineering

Education

Degree	Graduated in	Major	University
Ph.D	2022	Control Engineering	Shahid Beheshti University

Employment Information

Faculty/Department	Position/Rank	Employment Type	Cooperation Type	Grade
Electrical Engineeing Department	Assistant Professor	Tenure Track	Full Time	10

Work Experience

Intelligent systems research and development management - Keihan Map Maravia Company - (2016-present)

Management of Control Engineering Group (1401-present)

Management of graduate studies of the Faculty of Electrical Engineering (1401-present)

Managing the development of information technology, security and intelligence (1402-present)

Awards

Management of electrical engineering of virtual faculty (2015-2016)

Management of communication with the industrial department of electrical engineering faculty (2016-2018)

Expert for modeling research and control of 2.5 MW wind turbine - MAPNA - (2018-2021)

Subjects Taught

Linear Matrix Inequalities;

Modeling and Control of Nonlinear systems with Time delay;

Fault Detection and Fault Tolerant Control of Nonlinaer Systems;

Attack Detection in Real Time Systems;

Course Topics

Linear Matrix Inequalities in Control Engineering;

Modeling and Control of Nonlinear systems with Time delay;

Fault Detection and Fault Tolerant Control of Nonlinaer Systems;

Attack Detection in Real Time Systems;

Papers in Conferences

1. Hadi Azmi ,MPC Controller Design for Variable Speed Wind Turbines in the presence of Actuator Faults ,9th International Conference on Technology and Energy Management ,Mazandaran University of Science and Technology ,2024.
2. Aghaseyedabdollah, Y Alaviyan, H Azmi, A Yazdizadeh ,Fuzzy Fractional Order Sliding Mode Controller Design for a Wind Turbine with DFIG ,29th Iranian Conference on Electrical Engineeri ,pp. 637-642 ,2021.
3. H. Azmi, A. Yazdizadeh ,Adaptive tracking fault tolerant controller design for uncertain chemical reactor recycle system with unknown time-varying delay in the presence of disturbance and loss of actuators effectiveness ,27th Iranian Conference on Electrical Engineering ,2019.
4. H. Azmi, R. Babazadeh ,Robust Adaptive Fault Tolerant Controller (FTC) Design for Active Suspension System in the presence of physical parametric uncertainties ,23th Iranian Conference on Electrical Engineering ,2016.
5. H. Azmi, N. Matin, R. Rezaie ,Adaptive Fuzzy PID Controller Design for The Time delay in the Presence of Input and Output Disturbance ,Third International Conference on applied research in electrical, Mechanical & Mechatronic engineering ,2016.
6. R. Babazadeh, A. Khiabani, H. Azmi ,Optimal Control of Segway Personal Transporter ,International conference on Control, Instrumentation and Automation ,2016.
7. H. Azmi, R. Rezaie, N. Matin ,Adaptive Fuzzy PID Controller Design for The Evaporation Unit of Sugar Factories in the Presence of Input and Output Disturbance ,Third International Conference on applied research in electrical, Mechanical & Mechatronic engineering ,2016.
8. Hadi Azmi ,State Dependent Robust Adaptive Controller Design for Nonlinear System in Presence of Disturbances ,Iranian conference on electrical and electronic engineering ,2016.
9. Hadi Azmi ,Robust Adaptive Fault-Tolerant Controller Design with Loss of Actuators effectiveness Nonlinear Systems in presence of Bounded Disturbances ,Iranian conference on electrical and electronic engineering ,2016.
10. Hadi Azmi, Hossein Tohidi ,Nonlinear State Feedback Fault Tolerant Controller (FTC) Design applied to Three Phase Induction Motor ,iranian conference on electrical and electronic engineering

,2013.
11. M. Pezeshkian, H. Azmi, M. J. Khosrowjerdi ,A Robust Approach to Fault Tolerant Controller Design Based on GIMC structure for Non-Minimum Phase systems ,International conference on Control, Instrumentation and Automation ,2011.
12. H. Azmi, M. J. Khosrowjerdi ,Input Output Feedback Linearization control for Quadruple Tank System ,Iranian Electrical Engineering Student Conference, Tabriz ,2009.
13. Hadi Azmi ,Controller Design for non-minimum phase nonlinear systems ,Presented in the Dept. of Control. Engineering. Sahand University of Technology ,2009.

Papers in Journals

1. H. Azmi, A. Yazdizadeh,Adaptive Delay Dependent Sliding Mode Fault Tolerant Controller Design for Nonlinear Systems with Unknown Time-varying Input and State Delays,European Journal of Control,Vol. 100756,No. 69,2023,https://doi.org/10.1016/j.ejcon.2022.100756.
2. H. Azmi, A. Yazdizadeh,Fault-tolerant controller design for nonlinear systems with multiple input and state delays based on sliding mode algorithm,Int J Robust Nonlinear Control,Vol. 6180,pp. 1-22,2022,https://doi.org/10.1002/rnc.6180.
3. Hadi Azmi, Alireza Yazdizadeh,Robust adaptive fault detection and diagnosis observer design for a class of nonlinear systems with uncertainty and unknown time-varying internal delay,ISA Transactions,pp. 31-42,2022.
4. Hadi Azmi, Alireza Yazdizadeh,A Novel Delay-Independent Robust Adaptive Controller Design for Uncertain Nonlinear Systems With Time-Varying State Delay,Journal of Computational and Nonlinear Dynamics,Vol. 15,No. 1,pp. 1-12,2020.
5. Hadi Azmi, Mohammad Javad Khosrowjerdi,LMI-based adaptive output feedback fault-tolerant controller design for nonlinear systems,International Journal of Adaptive Control and Signal Processing,pp. 1885-1902,2017.
6. Hadi Azmi, Mohammad Javad Khosrowjerdi,Robust adaptive fault tolerant control for a class of Lipschitz nonlinear systems with actuator failure and disturbances,Proceedings of the Institution of Mechanical Engineers, Part I: Journal of Systems and Control Engineering,Vol. 230,No. 230,pp. 13-22,2016.
7. Reza Babazadeh, Hadi Azmi,Nonlinear Modeling and Optimal Output Control of Two Wheeled Balancing Transporter,Journal of Computer & Robotics,Vol. 7,No. 2,pp. 1-7,2015.
8. Reza Babazadeh, Hadi Azmi,Optimal Controller Design for Two Wheeled Balancing Transporter,Journal of Computer & Robotics,Vol. 7,No. 2,pp. 11-19,2015.
9. Hadi Azmi,Nonlinear Modeling and Optimal Output Control of Two Wheeled Balancing Transporter,Majlesi Journal of Electrical Engineering,Vol. 2,pp. 2-6,2015.
10. Hadi Azmi,State Dependent Robust Adaptive Controller Design for Nonlinear System in Presence of Disturbances,Majlesi Journal of Electrical Engineering,Vol. 2,pp. 1-6,2015.