Name & Surname: Seyyed Sajjad Moosapour

Date of Birth: Sep 21, 1981

Address, Suburb, State, Postcode: Department of Electrical Engineering, Shahid Chamran University of Ahvaz, Ahvaz, Khuzestan Province, Iran.

Phone/Mobile Number: +989163911691, +98-33330012/Ext.:5637

E-mail address: s.moosapour@scu.ac.ir, smoosapour@gmail.com

PROFESSIONAL PROFILE:

Assistant Professor of Control Engineering in Shahid Chamran University (SCU) of Ahvaz.

EDUCATION BACKGROUND:

Ph.D:

Control Engineering (2012), Tabriz University, Tabriz, Iran

Thesis Title:

"Three-Dimensional Guidance of a Medium-Range Surface-to-Air Missile Based on Nonlinear Model"

MSc:

Control Engineering (2006), Tabriz University, Tabriz, Iran

Dissertation title:

"Design of Optimal Guidance Law for Missile"

BS:

Control Engineering (2003), Sahand University of Technology, Tabriz, Iran

Final Project:

Experimental Control of Magnetic Levitation System

TEACHING AND TRAINING EXPERIENCE:

- Linear Control Systems (B.Sc.)
- Modern Control (B.Sc.)
- Digital Control (B.Sc.)
- Industrial Control (B.Sc.)
- Electrical Circuits (B.Sc.)
- System Identification (Ph.D. &M.Sc.)
- Nonlinear Control (Ph.D. &M.Sc.)
- Multivariable Systems (Ph.D. &M.Sc.)
- Disturbance Observers (Ph.D. &M.Sc.)

INTERESTS AND RESEACH FIELDS:

- Nonlinear Control
- Disturbance Observers
- Missile Guidance
- Developing, Modelling and Control of Experimental Setups

RESARCH ACTIVITIES:

PUBLICATIONS:

[1] H. Mehdipour, **S. S. Moosapour**, M. Keramazade, *"Construction, Modelling and control of an experimental helicopter (TRMS)*", J. Control, 2021, (**In Persian**), (**Online**).

[2] S. B. Fazeli Asl and **S. S. Moosapour**, *"Fractional Order Fuzzy Dynamic Backstepping Sliding Mode Controller Design for Triaxial MEMS Gyroscope Based on High-gain and Disturbance Observers*", IETE Journal Of Research, 2019 (**Online**).

[3] S. B. Fazeli Asl and **S. S. Moosapour**, *"Fractional Order Dynamic Sliding Mode Controller Design for Triaxial Gyroscope based on Backstepping Method*", Tabriz Journal of Electrical Engineering (TJEE), Vol. 49, No. 2, 2019, (**In Persian**).

[4] **S. S. Moosapour,** S. B. Fazeli Asl, Morteza Azizi, "*Adaptive fractional order fast terminal dynamic sliding mode controller design for antilock braking system (ABS)*", International Journal of Dynamics and Control, Vol. 7, No. 1, 2019.

[5] S. B. Fazeli Asl and **S. S. Moosapour**, "*Adaptive Backstepping Fast Terminal Sliding Mode Controller Design for Ducted Fan Engine of Thrust-Vectored Aircraft*", Aerospace Science and Technology, Vol. 71, pp. 521-529, 2017.

[6] M. Abasi, S. G. Seifossadat, M. Razaz, **S. S. Moosapour**, "*Determining the Contribution of Different Effective Factors to Individual Voltage Unbalance Emission in N-Bus Radial Power Systems*", International Journal of Electrical Power & Energy Systems, Vol. 94, pp. 393-404, 2018.

[7] J. Sarshar, **S. S. Moosapour**, and M. Joorabian, "*Multi-Objective Energy Management of a Micro-Grid Considering Uncertainty in Wind Power Forecasting*", Energy, Vol. 139, pp. 680-693, 2017.

[8] S. B. Fazeli Asl and **S. S. Moosapour**, *"Fractional Order Backstepping Fast Terminal Sliding Mode Control for Micro-Electro-Mechanical triaxial gyroscope*", Modares Mechanical Engineering, Vol. 17, No. 5, pp. 383-391, 2017, (**In Persian**).

[9] S. H. Moosapour and **S. S. Moosapour**, "*A Novel Optimal Robust Guidance Law Design Based on Extended Kalman Filter*", Aerospace Mechanics Journal, Vol. 11, No. 4, pp. 39-48, 2016, (**In Persian**).

[10] M. Abasi, M. Razaz, S. G. Seifossadat, **S. S. Moosapour,** "*Presenting a New Algorithm to Reduce and Control the Voltage Unbalance and Line Losses in Radial Power Systems"*, survey methodology, Vol. 44, No. 1, pp. 109–119, 2015.

[11] **S. S. Moosapour**, G. Alizadeh, S. Khanmohammadi, and S. H. Moosapour, "*A Novel Robust Proportional Navigation Guidance Law Design for Missile Considering Autopilot Dynamic*", Transactions of the Institute of Measurement and Control Vol. 35, No. 5, pp. 703–710, 2013.

[12] **S. S. Moosapour**, G. Alizadeh, S. Khanmohammadi, and Hamzeh Moosapour, "*A Novel Nonlinear Robust Guidance Law Design Based on SDRE Technique*", Int'l J. of Aeronautical & Space Sci. Vol. 13, No. 3, pp. 369–376, 2012.

[13] **S. S. Moosapour**, G. Alizadeh, and S. Khanmohammadi, "*Three-Dimensional optimal robust guidance law design for missile using sliding-mode control and SDRE control*", J. Control, Vol. 6, No. 2, pp. 55-64, 2012, (**In Persian**).

[14] I. Hassanzadeh, **S. S. Moosapour**, and S. Mansouri, "*Implementation and Investigation of Internet-Based Teleoperation of a Mobile Robot Using Wave Variable Approach*", Proc. IMechE Part I: J. Systems and Control Engineering, Vol. 224, No. 4, pp. 471-477, 2010.

CONFERENCE PRESENTATIONS:

[1] M. Derakhshannia, S. B. Fazeli Asl, **S. S. Moosapour**, M. Joorabian, "*Backstepping Terminal Sliding Mode Control Design for a TRMS*", 2021 7th International Conference on Control, Instrumentation and Automation (ICCIA), Tabriz, Iran, 2021.

[2] M. Derakhshanni and **S. S. Moosapour**, "*Sliding Mode Based Consensus for Networked Multi-agent Systems Consisting of Chaotic PMSMs*", 2019 International Power System Conference (PSC), Tabriz, Iran, 2019.

[3] A. Davoodi, **S. S. Moosapour**, M. Joorabian, "*Sliding Mode Controller for Rotor Side Converter of Doubly Fed Induction Generator in Wind Energy Conversion System*", 32th Power System Conference, PSC2017, Tehran, Iran, 2017, (**In Persian**).

[4] J. Sarshar, **S. S. Moosapour**, M. Joorabian, "*Energy Management of a Microgrid Using a Novel Wavelet Neural Network for Wind Power Forecast*", 31th Power System Conference, PSC2016, Tehran, Iran, 2016.

[5] S. H. Moosapour, M. Asadollahi, and **S. S. Moosapour**, "*State estimation in a power system by utilizing EKF and UKF*", 28 th Power System Conference, Tehran, Iran, 2013.

[6] S. H. Moosapour**, S. S. Moosapour**, and M. Asadollahi, "*State estimation in TPN and PPN guidance laws by using Unscented and Extended Kalman filters*", ICEE2013, Mashhad, Iran, 2013.

[7] **S. S. Moosapour** and G. Alizadeh, "*Application of Unscented kalman filter in TPN and APN guidance laws*", ICEE2007, Tehran, Iran, 2007 (**In Persian**).

LANGUAGES:

Persian (native)

English (good)