





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”

B.S.:

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

RESEARCH ACTIVITIES:

PUBLICATIONS:

- [1] H. Mehdipour, **S. S. Moosapour**, M. Keramzade, “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)