University Academic Curriculum Vitae

Personal information Education since leaving school

Parvin Mahmoudabadi

- year and title of first degree; (and university)
 B. Sc., Electrical Engineering (Control). Jul. 2014
 Department of Electrical and Electronics Engineering, Shiraz University of Technology, Shiraz, Iran.
- year and title of post-graduate degrees (and university)
 M. Sc., Electrical Engineering (Control). Aug. 2016
 Department of Electrical and Electronics Engineering, Shiraz University of Technology, Shiraz, Iran.
- year, subject area and title of PhD (and university)
 Ph.D., Electrical Engineering (Control). Sept. 2021
 Stability Analysis and Stabilization of Nonlinear Fractional-order Time-delay
 Systems Based on T-S Fuzzy Model"
 Department of Electrical Engineering, K. N. Toosi University of Technology,

Present appointment

Tehran, Iran.

year, subject area and title of Habilitation (and university)

- Title of appointment
- · start of appointment
- Level of appointment (in national / international context)
- employer (University, research institute, status of university / institute)
- · brief description of responsibilities

Professional experience

Chronological list of all previous employments (each with job title, starting and finishing dates, level, employer, responsibilities)

From / to	Job title	Name of academic Institution	Academic level	responsibilities
Dec 2024- Present	Research Assistant	Free university of Bolzano		
May 2023- April 2024	Research Assistant	Free university of Bolzano		Developing controller for UAVs
Jan.2020- Jul. 2020	Lecturer	K. N. Toosi University of Technology, Tehran, Iran.		Teaching
Sept. 2016- Jul. 2017	Lecturer	Sirjan University of Technology, Shiraz, Iran.		Teaching

In the case of practice-related projects carried out in co-operation with studios, agencies or other people, please specify your own contribution to and role in the project.)

Participation in exhibitions (where applicable)

Where applicable: Design competitions and awards received

(Only list competitions that were won or those with a relevant placement and/or award, with name and date of competition)

List of major exhibitions, Title, date, location.

Experience in academic teaching

 title of courses given last 5 years, name of University/Institute, subject area, academic level (under-/post-graduate / PhD), results of evaluations (full details in appendix)

Lecturer

Department of Electrical engineering, K. N. Toosi University of Technology, Iran

Course: Fundamentals of Electricity 1

Department of Electrical engineering, Sirjan University of Technology, Iran

— Courses: Linear Control Systems, Signal and Systems, Digital Systems, Electrical Measurements

Teaching Assistant

Department of Electrical engineering, K. N. Toosi University of Technology, Iran

— Course: Fractional-order Systems and Controllers

Department of Electrical and Electronics Engineering, Shiraz University of Technology, Iran

- Course: Modern Control Systems
- Summary of significant personal achievements in teaching
- Postgraduate supervision (PhD level): number of students supervised in the last five years with subject areas

Other academic responsibilities

- internal appointments to faculty and university boards
- external appointments at national and international level
- responsibilities for organizing conferences/seminars/exhibitions (place, duration, institute)

Memberships

Membership of academic or professional bodies (including membership of Editorial Boards of scientific publications; membership of scientific committees for international conferences)

Reviewer for several journals:

- IEEE Transactions on Robotics
- IEEE Journal of Oceanic Engineering
- IEEE Transactions on Fuzzy Systems
- Chaos, Solitons and Fractals
- Applied Mathematics and Computation
- Nonlinear Dynamics
- ISA Transactions
- International journal of fuzzy systems
- Transactions of the Institute of Measurement and Control
- IEEE Open Journal of Circuits and Systems

Research and scholarships

- Summary of current research and scholarship
- Summary of research and scholarship during the previous five years
- · Summary of significant achievements in research and scholarship
- · Research grants and contracts

Date granted	Award Holder(s)	Funding Body	Title	Amount received

Publications

Publications over the last 15 years in chronological order within each category following the International Standard for bibliographic references with DOI whenever possible. With multiple authorship the main author's name appears in *Italics*. In addition, in the left-hand margin please star (*) what you consider were especially significant publications. For accepted but not yet published works please indicate expected publication date. PUBLICATIONS WILL ONLY BE EVALUATED WHEN THEY CAN BE TRACED IN PUBLIC CATALOGUES.

- Books Authored
- Books Edited
- · Chapters in books
- Conference papers

Journal Article

- 1. P. Mahmoudabadi, K D. von Ellenrieder, M. Moroder, and M. Moroder. "Adaptive Super Twisting Sliding Mode Control for a Coaxial Octorotor UAV." (Preprint)
- 2. P. Mahmoudabadi, and A. Naderi Akhormeh. "Fuzzy Model Predictive Control for Nonlinear Discrete-Time Systems." International Journal of Adaptive Control and Signal Processing, 2023, DOI: 10.1002/acs.3737.
- 3. P. Mahmoudabadi, and M. Tavakoli-Kakhki. "Robust Tracking Control for Nonlinear Fractional Order Delayed Systems: Modified Repetitive Control Approach." Asian Journal of Control, 2023, DOI: 10.1002/asic.3299.
- 4. P. Mahmoudabadi, and M. Tavakoli-Kakhki. "Stabilization of Nonlinear Fractional Order Faulty Systems with Time-varying Delay." Journal of Vibration and Control, 2023, DOI: 10.1177/10775463231157496.
- 5. P. Mahmoudabadi, and M. Tavakoli-Kakhki. "Improved Stability Criteria for Nonlinear Fractional Order Fuzzy Systems with Timevarying Delay." Soft Computing, vol. 26(9), pp. 4215-4226, 2022.
- 6. P. Mahmoudabadi, M. Tavakoli-Kakhki and H. HosseinNia. "Fuzzy-Model-Based Disturbance Rejection Control for Atomic Force Microscopy with Input Constraint." Journal of Vibration and Control, vol. 29, pp. 597-610, 2022.
- 7. P. Mahmoudabadi, and M. Tavakoli-Kakhki. "Tracking control with disturbance rejection of nonlinear fractional order fuzzy systems: Modified repetitive control approach." Chaos, Solitons Fractals, vol. 150, 2021, DOI: 10.1016/j.chaos.2021.111142.
- 8. P. Mahmoudabadi, and M. Tavakoli-Kakhki. "Fuzzy observer-based disturbance rejection control for nonlinear fractional-order systems with

time-varying delay." Journal of Vibration and Control. vol. 28, pp. 2145-2154, 2021.

9. P. Mahmoudabadi, M. Shasadeghi, and J. Zarei, "New stability and stabilization conditions for nonlinear systems with time-varying delay based on delay-partitioning approach," ISA Trans., vol. 70, pp. 46–52, 2017.

Conference Article

- 1. P. Mahmoudabadi, K D. von Ellenrieder, M. Moroder, and M. Moroder. "Safety-critical Control for a Coaxial Octorotor UAV via Control Barrier Function." (Accepted: 10th International Conference on Control, Decision and Information Technology.)
- 2. P. Mahmoudabadi, M. Tavakoli-Kakhki, and Roohallah Azarmi, "Delayed State-Feedback Fuzzy Control for Nonlinear Fractional Order Systems: An LMI Approach." In 2022 23rd International Carpathian Control Conference (ICCC), pp. 37-42. IEEE, 2022.
- 3. P. Mahmoudabadi, and M. Shasadeghi, "Non-PDC control design for nonlinear time-delay systems by delaypartitioning approach," International Conference on Fundamental Reseach In Electrical Engineering., pp. 91–98, Sep. 2017.
- 4. P. Mahmoudabadi, and M. Shasadeghi, "Improved stability criteria for time-delay T-S fuzzy systems based on fuzzy Lyapunov function and delay-partitioning approach," 1st International Conference on New Research Achievements In Electrical and Computer Engineering, pp. 1–7, 2016.
- · Official reports (whole or part)
- Other publications
- Exhibitions

Articles published by others in magazines, etc. about the applicant or his/her projects

Publications <u>about</u> the applicant

Further data

Presentations at scientific conferences over past 3 years (invited or selected, keynote, nature and status of conference)

Entrepreneurship

Spin-offs, patents and entrepreneurship

Statement of interest

Candidates should outline reflexively their expected contribution to the advertised position at the unibz and to the university overall. This statement should highlight relevant elements of the candidate's CV that underline the particular suitability of the applicant.

Language competence

Written and spoken competence in all languages according to CERF levels, Common European Reference Framework (http://www.coe.int/t/dg4/linguistic/cadre1_en.asp); append certificates wherever available

Date 29/10/2024

Signature