1. **Name   Muhammad Umer Hameed Shah**

2. **Education:**

Degree	Discipline	Institution	Year
Ph.D.	Mechanical Engineering	Pusan National University, South Korea	2018
Master	Mechanical Engineering	National University of Sciences and Technology, Pakistan	2012
Bachelor	Mechanical Engineering	Qu National University of Sciences and Technology, Pakistan	2005

3. **Academic Experience:**

Institution	Rank	Position Title	Years	FT/PT*
Ajman University, UAE	Assistant Professor	Acting Head of the Department	2023 – present	FT
Ajman University, UAE	Assistant Professor	Assistant Professor	2021 – present	FT
Khalifa University, UAE	Postdoctoral Fellow	Postdoctoral Fellow	2019 – 2021	FT
Texas A&M University at Qatar	Postdoctoral Research Associate	Postdoctoral Research Associate	2018-2019	FT
Pusan National University, South Korea	Postdoctoral Researcher	Postdoctoral Researcher	2018-2018	FT
National University of Sciences and Technology, Pakistan	Lecturer	Lecturer	2012-2013	FT

4. **Non-Academic Experience:**

Company or Entity	Title	Brief Description of Position	Years	FT/PT
National Engineering and Scientific Commission of Pakistan	Design Engineer ~ Manager	Computer Aided Design and Manufacturing, Vibration and Thermal Analysis; Manufacturing Management; Project Management.	2006 - 2012	FT

5. **Certifications or professional registrations**

- Certificate: AutoCAD (Basic & Advance) by Autodesk
- Short course: Introduction to ANSYS Part I & II by ANSYS, Inc.
- Short course: Non-linear Finite Element Methods, GIKI

6. **Current membership in professional organizations**

- American Society of Mechanical Engineering (ASME), USA.
- Member, Institute of Electrical and Electronics Engineers (IEEE)

7. Honors and awards

- Best Scientific Research Award, 7th AU Students Research Day, May 2024.
- Student Travel Grant Award, The Society of Instrument and Control Engineers SICE), SICE Annual Conference, Kanazawa, Japan, Spt. 2017.
- Outstanding Paper Award, 2015 International Automatic Control Conference (CACS 2015), Yilan, Taiwan, Nov. 2015.
- Best Presentation Award, 14th International Conference on Control, Automation and Systems (ICCAS), KINTEX, S. Korea, Oct. 2014.
- Best Paper Award, ICROS/KROS/KIIS, Pusan National University, S. Korea, Dec. 2013.
- Ph.D. Scholarship, The World Class University Program, S. Korea, March 2013 ~ Feb. 2018.

8. Service activities (within and outside of the institution)

- Contributed to most aspects of development and implementation of program accreditation of B. Sc. in Mechanical Engineering (ABET).
- Involved in the establishment of industry-academia relations.
- Liaison officer, College of Engineering and Information Technology (CEIT), for Ajman University's Fundraising Initiative.
- Committee Member for CEIT's Co-Op Program.
- Acting Head of the Department of Mechanical Engineering, CEIT, Ajman University.
- Evaluated several Ph. D and M.Sc. theses and undergraduate capstone projects.
- Regularly contribute to several committees at university, college and department level.
- Regularly arrange Guest Lectures and Workshops for Ajman University students.
- Regularly arrange Student Internships.
- Regularly review scientific papers for international journals and conferences.
- Contributed to organizational activities for international conferences.

9. Important publications and presentations for the last 5 years:

- Ismail, F., Khawaja, S.G., Khan, A.M., ***Shah, U.H.***, Akram, M.U. and Shaukat, A., 2025. Cognitive link adaptation via modulation scheme classification in narrowband networks under AWGN and SUI channel conditions. *Scientific Reports*, *15*(1), p.27604.
- Yasmeen, S., Waris, A., Amin, F., Iqbal, J., Gilani, S.O., Khan, M.J., Hazzazi, F., Imran, A., ***Shah, U.H.*** and Ijaz, M.A., 2025. Identification and quantification of muscular cocontraction for ankle rehabilitation through variational mode decomposition in surface electromyography. *Scientific Reports*, *15*(1), p.14847.
- Nayab, M., Waris, A., Jawad Khan, M., AlQahtani, D., Imran, A., Gilani, S.O. and ***Shah, U.H.***, 2025. Gaussian process latent variable models-ANN based method for

automatic features selection and dimensionality reduction for control of EMG-driven systems. *Frontiers in Artificial Intelligence*, *8*, p.1506042.

- Moin, H., ***Shah, U.H.***, Khan, M.J. and Sajid, H., 2024. Fine-Tuning Quadcopter Control Parameters via Deep Actor-Critic Learning Framework: An Exploration of Nonlinear Stability Analysis and Intelligent Gain Tuning. *IEEE Access*.
- Piao, M., ***Shah, U.H.***, Huang, G. and Hong, K.S., 2024. Super-twisting sliding mode control of container cranes with triangle-trapezoid rope reeving system. *International Journal of Control, Automation and Systems*, 22(1), pp.16-26.
- Faris, O., Alyammahi, H., Suthar, B., Muthusamy, R., ***Shah, U.H.***, Hussain, I., Gan, D., Seneviratne, L. and Zweiri, Y., 2023. Design and experimental evaluation of a sensorized parallel gripper with optical mirroring mechanism. *Mechatronics*, 90, p.102955.
- Niu, Z., Awad, M.I., ***Shah, U.H.***, Boushaki, M.N., Zweiri, Y., Seneviratne, L. and Hussain, I., 2022. Towards safe physical human-robot interaction by exploring the rapid stiffness switching feature of discrete variable stiffness actuation. *IEEE Robotics and Automation Letters*, 7(3), pp.8084-8091.
- ***Shah, U.H.***, Muthusamy, R., Gan, D., Zweiri, Y. and Seneviratne, L., 2021. On the design and development of vision-based tactile sensors. *Journal of Intelligent & Robotic Systems*, 102, pp.1-27.
- ***Shah, U.H.***, Karkoub, M., Kerimoglu, D. and Wang, H.D., 2021. Dynamic analysis of the UVMS: effect of disturbances, coupling, and joint-flexibility on end-effector positioning. *Robotica*, 39(11), pp.1952-1980.
- For more publications, please visit:
  https://scholar.google.co.kr/citations?user=myWv6VAAAAAJ&hl=en
  or https://www.scopus.com/authid/detail.uri?authorId=56028680000

Most recent professional development activities:
- Academic Advising Workshop
- Using AI to improve student engagement and outcomes
- Effective assessment of courses and programs
- ABET Training
- Experiential Learning Workshop