



**Full Name: Dr. Sohail Abdul Sattar**

**Position/ Designation: Professor**

**Faculty/Department: FEPS/DCS**

**Email Address: [sohail.sattar@nhu.edu.pk](mailto:sohail.sattar@nhu.edu.pk)**



## Short Introduction

Prof. Dr. Sohail Abdul Sattar joined Nazeer Hussain University in December 2018 as Professor and Chairman till 27<sup>th</sup> Jan, 2025, Department of Computer Science.

Prof. Sohail graduated in Mechanical Engineering from NED University and working for a few years in the industry he then dedicated his interest to developing in the field of computer science. He obtained MCS from Karachi University and MS (CS) from NED University. He then pursued his research in the field of Artificial Intelligence, Computer Vision at the University of Central Florida, Orlando USA in a collaborative research program with NED University and was awarded his PhD by NEDUET and a research achievement certificate by UCF.

Prof. Sohail has worked as a professor and Co-chairman in the departments of Computer Science and Information Technology and Software Engineering at the NED University for several years. Professor Sohail brings to the University extensive research and knowledge in fields of Machine Learning, Data Science and Computer Vision.

His experience is multifaceted and diverse encompassing the supervision of several MS thesis, administration as well as academic research in multiple initiatives.

Professor Sohail's contributions to the teaching community also includes leading several training programs for teaching and assessing students work online.

Professor Sohail has presented his research papers and articles in a number of international conferences and travelled widely sharing his research with the global community. He won his scholarship for PhD and several travel grants to present research articles in international conferences abroad as well as in Pakistan.

Professor Sohail is a modern day thinker and reads avidly to continue his passion for acquiring and spreading knowledge and education to the society.



## Experience

### WORK EXPERIENCE

<u>Place</u>	<u>Position</u>	<u>Period</u>
DCS, FEPS, NHU	Professor	Feb. 2021 – date
DCS, FEPS, NHU	Chairman	Feb. 2021 – date
FEPS, NHU	Dean	Nov. 2019 –Oct. 2020
DCS, FEPS, NHU	Professor	Dec. 2018 –Oct. 2020
DCS, FEPS, NHU	Chairman	Dec. 2018 –Oct. 2020
CS &IT Department, NED UET	Visiting Prof.	Aug. 2018 – date
CS &IT Department, NED UET	Co-Chairman	2009-2018
CS &IT Department, NED UET	Professor	2011-2018
CS &IT Department, NED UET	Associate Professor	2009-2011
CS &IT Department, NED UET	Assistant Professor	2003-2009
IT Center, NED University	Lecturer	2002-2003



## Educational Information

### QUALIFICATION

- |                               |      |   |                |
|-------------------------------|------|---|----------------|
| ▪ PhD<br>(Computer Science)   | 2009 | NED University of Engg. & Tech. Karachi,<br>Collaborative research at UCF, Orlando, USA   |                |
| ✚ PhD Dissertation            | :    | A Simple Technique for the Design and Implementation of an OCR for Printed Nastaliq Text  |                |
| ✚ PhD Supervisor 1            | :    | Prof. Dr. Shamsul Haque, Pro-Vice Chancellor NED University of Engineering & Technology, Karachi, Pakistan  |                |
| ✚ PhD Supervisor 2            | :    | Prof. Dr. Mubarak Shah, Agere Chair Professor and Director, Computer Vision Lab, School of Electrical Engineering & Computer Science, University of Central Florida, Orlando, USA |                |
| ▪ MS<br>(Computer Science)    | 2002 | NED University of Engg. & Tech. Karachi   | 3.58<br>CGPA   |
| ▪ MCS<br>(Computer Science)   | 2003 | Karachi University  | First<br>Class |
| ▪ CERT.-IN-ED.<br>(Education) | 1996 | Accredited by University of Bradford, England   | Pass           |
| ▪ BE<br>(Mech. Engg.)         | 1988 | NED University of Engg. & Tech. Karachi   | First Class    |



## Achievements, Research/Publications

### PROFESSIONAL ASSOCIATIONS

- Life-member 'Pakistan Engineering Council'.
- Corporate Member 'Institution of Engineers' (Pakistan)\
- Member International Association of Engineers

### SCIENTIFIC & TECHNICAL COMMITTEES MEMBERSHIPS

- Member Senate, NED University, till August, 2018.
- Member Academic Council, NED University, till August, 2018.
- Member Board of Faculty, Faculty of Information, Sciences and Humanities, NED University, till August, 2018.
- Member Board of Faculty, Faculty of Mechanical and Manufacturing Engineering, NED University, till August, 2018.
- Member Board of Studies, Department of Computer Science & Information Technology, NED University, till August, 2018.
- Chairman Final Year Project Committee, CSIT & SE Departments, NED University since 2009 , till August, 2018.
- Member organizing committee and conference co-convenor, ICONICS 2016, Innovations in Computer Science & Software Engineering, an International Conference organized by the department of Computer Science & Software Engineering at NED University.
- Member Technical Program Committee, CTS, International Conferences, USA, since 2006 till 2012
- Member Technical Program Committee, FIT, International Conferences, Pakistan, since 2011 till 2014
- Member Technical Program Committee, INMIC, International Conferences, Pakistan, since 2011 till 2014



- Member Technical Program Committee, ICCIT-2012, International Conference, Tunisia, 2011
- Member Technical Program Committee, HONET-2018, International Conference, Islamabad, Pakistan, 2018.

### **RESEARCH EXPERIENCE**

- Worked as research scholar in the faculty development program at the department of Computer Science & Information Technology, NED University of Engineering & Technology, Karachi, on the research project entitled “Optical Character Recognition for printed Nastaliq text”, July 2004-July 2009.
- Worked as a visiting research scholar at the Computer Vision Lab, in the School of Electrical Engineering & Computer Science, University of Central Florida, USA, for a total of twelve months in two visits, under the supervision and guidance of Prof. Dr. Mubarak Shah from Nov. 2006 to April 2007 & Nov. 2007 to April 2008.

### **ACADEMIC RESEARCH PROJECTS SUPERVISED**

Supervised more than thirty academic research projects, related to Undergrad and Masters programs.

### **RESEARCH INTERESTS**

- Arabic Script languages in ICT
- Digital Image Processing
- Data Mining
- Machine Learning

### **Presentations at International Conferences**

Presented research papers at the following International Conferences

1. “*Mathematics in Image Processing: A Case-study for Edge Detection*” in the proceedings of,



- ICMS2-2010, International Conference on Mathematical Sciences, Kuala Lumpur, Malaysia, 30Nov.-03 Dec., 2010
2. “Jawi OCR: Opportunities and Challenges” in the proceedings of, GMS’10, Graphics and Multimedia Symposium 2010, University Tenaga National, Kajang, Malaysia, Nov. 29, 2010
  3. “A Finite State Model for Urdu Nastalique Optical Character Recognition”. International Journal of Computer Science and Network Security, Vol. 9, No. 9, September 2009, pp. 116-122
  4. “Segmentation of Nastalique Script for OCR”. ICOCI-2009, in the proceedings of, International Conference on Computing & Informatics, Kuala Lumpur, Malaysia, 24-25 June, 2009
  5. “Interactive Training Framework A New Approach to eLearning”, in the proceedings of, [FIT '09](#) Proceedings of the 7th International Conference on Frontiers of Information Technology, Abbottabad, Pakistan, [ACM](#) New York, NY, USA ©2009, Dec 16-18, 1009
  6. “Nastaliq Optical Character Recognition”, in the proceedings of, ACM SE 2008 Conference, Auburn University, Auburn, Alabama, USA, March 27-28, 2008
  7. “Implementation Challenges for Nastaliq Character Recognition”, in the proceedings of, IMTIC 2008, International Multitopic Conference, organized by Mehran University of Engineering & Technology in collaboration with Aalborg University, Esbjerg, Denmark, at Jamshoro, Pakistan, April 11-12, 2008
  8. “A comparison of Nastaliq and Roman script OCRs”, at ICCCE 06 , International Conference on Computer and Communication Engineering organized by IEEE and the faculty of Engineering, International Islamic University, Malaysia, May 9 – 11, 2006, Kuala Lumpur, Malaysia
  9. “Nastaliq Optical Character Recognition”, at ACM SE 2008 Conference, Auburn University, Auburn, Alabama, USA
  10. “Implementation Challenges for Nastaliq Character Recognition”, at IMTIC 2008, International Multitopic Conference, organized by Mehran University of Engineering & Technology in collaboration with Aalborg University, Esbjerg, Denmark, at Jamshoro, Pakistan
  11. “Segmentation of Nastalique Script for OCR”, at ICOCI-2009, International Conference on Computing & Informatics, Kuala Lumpur, Malaysia



## **PUBLICATIONS**

- Sattar S. A., Hina S., Khursheed N., Hamid A. “*Urdu Documents Classification Using NAÏVE BAYES*”, Indian Journal of Science and Technology, 2017.
- Hina S., Shaikh A., Sattar S. A. “*Analyzing Diabetes datasets Using Data mining tools (WEKA)*”, Journal of Basic and Applied Sciences, 2017.
- Siddiqui, M. A., Khan, T. A., and Sattar, S. A., “*Estimating News Coverage Index Using Probabilistic Topic Model*”, in the proceedings of International Conference on Innovations in Computer Science and Software Engineering (ICONICS-2016) on 15-16 December 2016, NED University, Karachi, Pakistan
- Ali, N. A., and Sattar, S. A., “*Development of Pre-processing Tools for Urdu Text Processing*”, in the proceedings of International Conference on Innovations in Computer Science and Software Engineering (ICONICS-2016) on 15-16 December 2016, NED University, Karachi, Pakistan
- Faraz, S. M., Sattar, S. A., Khan, T. A., “*Gesture based Roman to Perso-Arabic Script Input for Touch User Interfaces*”, in the Mehran University Research Journal of Engineering & Technology, Volume 34, Issue S1, August, 2015 [ISSN 0254-7821], pp. 77-86
- Siddiqui, M. A., Faraz, S. M., and Sattar, S. A., “*Discovering the Thematic Structure of the Quran using Probabilistic Topic Model*” Taibah University International Conference on Advances in Information Technology for the Holy Quran and Its Sciences, NOORIC 2013, held 22-25 December 2013, Al-Madinah Al-Munawarah, Saudi Arabia
- Faraz, S. M., and Sattar, S. A., “*Design of a Recording Engine for Interactive eLearning Schemes to Teach Software*” Scientific Journal of Education Technology, ISSN: 2164-2826, Dec. 2013, Vol. 3 Iss. 12, pp. 197-204
- Ahsan, U., Sattar, S. A., Noor, H., “*Multi-cue Object Detection and Tracking for Security in Complex, Occluding Environment*” SPIE Defense, Security, and Sensing Symposium held 23-27 April 2012 in Baltimore, Maryland USA
- Sattar, S. A., Shah, S., “*Character Recognition of Arabic Script Languages*” ‘1st Taibah University International Conference on Computing and Information Technology (ICCIT-2012)’ to be held 12-14 March 2012, at Madinah Munawarah, Saudi Arabia



- Sattar, S. A., Haque, S., Pathan, M., K., “*A Finite State Model for Urdu Nastalique Optical Character Recognition*”. International Journal of Computer Science and Network Security, Vol. 9, No. 9, September 2009, pp. 116-122
- Sattar, S. A., “*Mathematics in Image Processing: A Case-study for Edge Detection*” ICMS2-2010, International Conference on Mathematical Sciences, Kuala Lumpur, Malaysia, 30Nov.-03 Dec., 2010
- Sattar, S. A., Siddiqui, A., “*Jawi OCR: Opportunities and Challenges*” GMS’10, Graphics and Multimedia Symposium 2010, University Tenaga National, Kajang, Malaysia, Nov. 29, 2010
- Faraz, S., M., Behlim, S., I., Sattar, S. A., “*Interactive Training Framework A New Approach to eLearning*”. [FIT '09](#) Proceedings of the 7th International Conference on Frontiers of Information Technology, Abbottabad, Pakistan, [ACM](#) New York, NY, USA, Dec 16-18, 2009
- Sattar, S. A., Haque, S., Mahmood K. Pathan , *segmentation of Nastalique Script for OCR*”. ICOCI-2009, International Conference on Computing & Informatics, Kuala Lumpur, Malaysia, 24-25 June, 2009
- Sattar, S. A., Haque, S., Pathan, M., K., and Quintin Gee “*Implementation Challenges for Nastalique Character Recognition*”. IMTIC 2008, International Multitopic Conference, organized by Mehran University of Engineering & Technology in collaboration with Aalborg University, Esbjerg, Denmark, at Jamshoro, Pakistan, April 11-12, 2008
- Sattar, S. A., Haque, S., Pathan, M., K., “*Nastalique Optical Character Recognition*”. ACM SE 2008 Conference, Auburn University, Auburn, Alabama, USA, March 27-28, 2008
- Sattar, S. A., Hyder, S., S., Pathan, M., K., “*Problems of Nastalique OCR: A comparison of Nastalique and Roman script OCRs*” ICCCE 06 , International Conference on Computer and Communication Engineering, Kuala Lumpur, Malaysia, May 9 – 11, 2006