DR. MUHAMMAD NOUMAN NOOR

Date of Birth: 5th Feb, 1993
Residence: Islamabad, Pakistan
Mobile: (+92) 331-5227454
Email: mnoumannoor93@gmail.com
Google Scholar profile: https://scholar.google.com/citations?user=21h9besAAAAJ&hl=en
LinkedIn Profile: www.linkedin.com/in/muhammad-nouman-noor-phd-266644a2

Experienced Academic Professional with a strong background in both industry and academia. Leveraging over 11 years of experience with 5 years of software development experience, including diverse project contributions, and more than 6 years of experience in teaching, research, and AI-based projects. Acquired funding of 12 million for research projects related to AI-based diagnosis. Authored 21 impactful research articles, 6 conference papers, and 2 book chapters, reflecting expertise in computer vision, deep learning, medical image processing, and related domains. Demonstrated leadership through the supervision of numerous software projects and master's theses, fostering practical skills and academic growth. Proficient in collaborating across multidisciplinary teams, delivering high-quality softwares and AI solutions, and providing valuable insights for real-world computer science challenges. A dynamic and resourceful individual who bridges the gap between practical IT industry problems and advanced academic research.

EDUCATION

Ph.D. HITEC University Taxila, PK, Computer Science – CGPA: 3.89
Sep 2020 – Dec 2023
Thesis: "Machine Learning Based Gastrointestinal Disease Recognition"
Advisor: Dr. Muhammad Nazir
Main Courses: Adv. Digital Image Processing, Machine Learning, High-Performance computing with multicore GPUs

MS Bahria University Islamabad, PK, Computer Science – CGPA: 3.41
Sep 2017 - Aug 2019
Thesis: "Automation testing suitability checking for software projects – A machine learning based model"
Advisor: Dr. Tamim Ahmed Khan
Main Courses: Adv. Digital Image Processing, Deep Learning, Machine Learning

BS UIIT – Arid Agriculture University Rawalpindi, PK, Computer Science – CGPA: 3.59
Sep 2010 - Aug 2014
FYP: "App Store"

EXPERIENCE

National University of Computer and Emerging Sciences (FAST-NU) ISB, PK

- **Assistant Professor-Computer Science** Aug 2024 to Present
  - Teaching courses
    - Generative AI
    - Natural Language Processing (MS)
    - Adv. Topics in Generative AI (MS)

- Object Oriented Programming
- Adv. Computer Vision (PhD)

HITEC University, Taxila PK

- **Assistant Professor-Computer Science** Feb 2024 to Aug 2024
  - Teaching courses
    - Digital Image Processing
    - Object Oriented Programming

- **Lecturer-Computer Science** Feb 2020 to Feb 2024
  - Teaching programming courses
    - Digital Image Processing
    - Visual Programming (Asp.Net/C#)
    - Programming Fundamentals (C++)
    - Object Oriented Programming (Java)
    - Database Systems (MS SQL)
  - Lead the software projects of HIT (Heavy Industies Taxila) and NAPHDA (Naya Pakistan Housing Development Authority)
  - Supervising MS Thesis

All-Star Technologies (Subsidiary of Star Leads Media LLC, USA)

- **Senior Software Engineer** Feb 2016 to Feb 2020
  - Team Lead
  - Bug fixing and adding new features.
  - Asp.Net, C#
  - Data Analysis

Vizteck Solutions, Pakistan

- **Software Engineer**, Dec 2014 to Feb 2016
  - Automation and manual Testing, Selenium, Mocha etc

PUBLICATIONS

Journals = 21 (15 IF and 6 Non-IF), Book Chapters = 2, Conferences = 6, Impact Factor = 55+, Citations: 270+, H-Index: 08, I10-Index: 07

Journal Papers

- "A framework based on hybrid Suzuki-Abe and convex Hull approach for improved classification of skin lesions", *Scientific Reports*, (Impact Factor: 4.9), 2026.
- "A Hybrid Deep Learning Based Robust Framework for Enhancing the Prediction of Skin Lesions", *Network Modeling Analysis in Health Informatics and Bioinformatics*, (Impact Factor: 2.0), 2026.
- "Impact of CT Intensity and Contrast Variability on Deep-Learning-Based Lung-Nodule Detection: A Systematic Review of Preprocessing and Harmonization Strategies (2020–2025)", *Diagnostics*, (Impact Factor: 3.8), 2026.

- "GastroNet: A Robust Attention-based Deep Learning and Cosine Similarity Feature Selection Framework for Gastrointestinal Disease Classification from Endoscopic Images", *CAAI Transactions on Intelligence Technology*, (Impact Factor: 7.98), 2023.
- "An Effective Approach for Recognition of Crop Diseases Using Advanced Image Processing and Yolo-V8", Food Science & Nutrition, (Impact Factor: 3.6), 2026.
- "An Attention-Based Multimodal Hybrid Deep Learning Framework for Pneumonia Classification Using Chest X-Rays and Radiologist-Annotated Severity Labels", PeerJ Computer Science, (Impact Factor: 2.9), 2026.
- Improving Inference Time in Diabetic Retinopathy - Recent Trends and Future Directions, *IEEE Access*, (Impact Factor: 3.6), 2025.
- "Efficient Gastrointestinal Disease Classification Using Pretrained Deep Convolutional Neural Network", *Electronics (Switzerland)*, (Impact Factor: 2.69), 2023.
- "Enhanced Skin Disease Classification via Dataset Refinement and Attention-Based Vision Approach", *Bioengineering*, (Impact Factor: 3.8), 2025.
- "Gastrointestinal Diseases Classification Using Deep Transfer Learning and Features Optimization", *Computers Materials and Continua (CMC)*, (Impact Factor: 3.77), 2023.
- "A Systematic Review on Synthetic Medical Images Generation—Recent Trends and Future Opportunities", *Diagnostics*, (Impact Factor: 3.8), 2026.
- "Localization and Classification of Gastrointestinal Tract Disorders Using Explainable AI from Endoscopic Images", *Applied Sciences*, (Impact Factor: 2.7), 2023.
- "Improving Deep Learning Based Lung Nodule Classification Through Optimized Adaptive Intensity Correction", *Bioengineering*, (Impact Factor: 3.7), 2026.
- "Using network science to understand the link between subjects and profession", *Computers in Human Behavior*, (Impact Factor: 6.89), 2020.
- "A Review on Big Data and Social Network Analytics Techniques", *Researchpedia Journal of Computing*, 2020.
- "A Review of Career Selection Models", *Researchpedia Journal of Computing*, 2020.
- "Machine Learning Model to Predict Automated Testing Adoption", *International Journal of Software Innovation (IJSI)*, (Impact Factor: 1.34), 2022.
- "Recognition of Gastrointestinal Diseases – Trends and Advancements", *BioScientific Review*, 2023.
- "Augmented Narratives: Unveiling the Efficacy of Storytelling in Augmented Reality Environments", *Xi'an Shiyou Daxue Xuebao (Ziran Kexue Ban)/Journal of Xi'an Shiyou University*, Natural Sciences Edition (Impact Factor: 0.40), 2024.
- "The Impact of Al on Society: A Multifaceted Ethical Examination", *International Journal of Islamic Studies and Culture (IJISC)*, 2024.
- "A Review Based on Active Research Areas in Mining Software Bug Repositories: Limitations and Possible Future Trends", *International Journal of Innovations in Science & Technology (IJIST)*,(Impact Factor: 4.0), 2024.
- "Identifying Significant Factors Associated with Career Selection: A survey based study in Pakistan", *Pakistan Journal of Engineering, Technology & Science (PJETS)*, 2024.

Conference Papers

- "Optimizing 3D Whole-Heart Segmentation in Cardiac MRI Using SegResNet: An Explainable Approach", 7th Mediterranean Conference on Pattern Recognition and Artificial Intelligence (MedPRAI-26)
- "Explainable Deep Learning Based Ensemble Model for Multi Class Congenital Heart Disease Screening Using Chest X-Rays", 7th Mediterranean Conference on Pattern Recognition and Artificial Intelligence (MedPRAI-26)
- "Sketch Recognition using Pre-Trained Model", National Conference on Engineering & Computing Technologies, NCECT, 2021.
- "A Framework for Multi-Grade Classification of Ulcerative-Colitis Using Deep Neural Networks", 25th IEEE International Multi Topic Conference, 2023.
- "Optimal Feature Selection and Multi-Class Classification of Skin Cancer Using Pre-Trained Deep Neural Networks", FUSST International Conference on Computer Science and Engineering (FICSE), 2024.
- "Analysis of Dermoscopic Images for Classification of Skin Lesions using Advanced Image Processing Techniques", 4th IEEE International Conference on Computing and Machine Intelligence (ICMI), 2025.

Book Chapters

- "Analysis of GAN-Based Data Augmentation for GI-Tract Disease Classification", In Advances in Deep Generative Models for Medical Artificial Intelligence. Studies in Computational Intelligence, vol 1124. Springer, Cham.
- "Machine Learning Techniques in Conjunction with Data Science Applications for CR-IoV", In Cognitive Radio-based Internet of Vehicles Architectures, Applications and Open issues, CRC Press, ISBN 9781032257556, 2024.

LIST OF MS THESIS SUPERVISED

1. **Ms. Maryam Sana, MSAI, Completed, 2025**
   Thesis Title: XAIDeepSkin - An Approach for Diagnosis of Skin Lesions using Deep Neural Network and Explainable
2. **Khalida Anum, MSAI, Completed, 2025**
   Thesis Title: A Framework for Multiclass Classification in the Diagnosis of COVID-19 Severity
3. **Awais Riaz, MSDS, Completed, 2026**
   Thesis Title: Optimized Feature Selection for Diabetic Retinopathy Detection Using Deep Learning Models
4. **Saba Khan, MSDS, Completed, 2026**
   Thesis Title: Light Intensity Variations in Lungs Nodule Detection from CT Scans
5. **Zainab Ghaffar, MSDS, Completed, 2026**
   Thesis Title: Multiclass Sentiment Analysis of Product Reviews using Code-Mixed Language
6. **Yumna Waheed, MSAI, Completed, 2026**
   Thesis Title: Generation of Quality Images using GANs to Improve Gastrointestinal Disease Recognition

7. **Ahmed Talha Aamer, MSDS, Completed, 2026**
   Thesis Title: Parameter Efficient Multimodal Sentiment Analysis

EDITORIAL MEMBER

Journals

- Review Activity for the **International Journal of Imaging Systems and Technology** (6)
- Review Activity for the **CAAI Transactions on Intelligence Technology** (2)
- Review Activity for the **Annals of Medicine** (1)
- Review Activity for the **SLAS Technology** (2)
- Review Activity for the **Cogent Engineering** (1)
- Review Activity for the **Neural Computing and Applications** (4)
- Review Activity for the **Computers, Materials & Continua** (6)
- Review Activity for the **PLOS ONE** (1)
- Review Activity for the **Cogent Engineering** (1)
- Review Activity for the **Peerj Computer Science** (1)

Conferences

- Technical Program Committee Member for the **2nd International Conference on Engineering software for the Modern Challenges**.
- Technical Program Committee Member for the **5th International Conference on Intelligent Technologies and Applications**.
- Technical Program Committee Member for the **7th International Conference on Advancements in Computational Sciences.**
- Technical Program Committee Member for the **2nd International Conference on Recent Advances in Mathematics and Informatics**.
- Technical Program Committee Member for the **2nd International Conference on Intelligent Perception and Computer Vision (CIPCV 2024)**
- Review Activity for the **1st International Conference on Innovative Engineering Sciences & Technological Research (ICIESTR-2024)** (4)
- Review Activity for the **3rd International Conference on Engineering and Computing Technologies (ICECT 2024)** (4)
- Review Activity for the **1st International Conference on Artificial Intelligence & Data Analytics (CAIDA 2021)** (3)

PROJECTS

1. Secure NRPU-HEC funding of 10.505 million for the project on Right Ventricular Segmentation for Congenital Heart Disease.
2. Secure FRSG project funding of 1.5 million for the project title “Early Diagnosis of Hirschsprung Disease Using Deep Learning”.
3. Truck on Go : Ignite
4. Techmetascore : Ignite and Best FYP

ACADEMIC AND RESEARCH ACHIEVEMENTS

1. Deliver a seminar to the Customs Officers of Pakistan at the Customs Academy of Sciences Islamabad 2026

2. Member of Curriculum Review Committee and Outcome-Based Education Committee at Fast NUCES, Islamabad 2025

3. Member Board of Faculty (BoF) - University Institute of Information Technology (UIIT), PMAS Arid Agriculture University Rawalpindi 2025

4. Organized and delivered a seminar on Outcome-Based Education at Fast NUCES 2025

5. Conducted a workshop on end-to-end solution on modern database technologies, Islamic International University, Islamabad 2025

6. Conducted a seminar on Deep Learning and Its Advancements, PMAS Arid Agriculture University Rawalpindi 2025

7. Successfully supervised 5 MS students as a supervisor and 2 as a co-supervisor.

8. Best Research Paper Award at International Conference on Computer Science and Engineering (FICSE), 2024 FUSST. 2024

9. Conducted Workshop on Deep Learning at Foundation University, Islamabad (FURC Rawalpindi Campus 2023

10. Best Research Paper Award at National Conference of Engineering & Computing Technology (NCECT), 2021 NUML. 2021

11. Speaker at Pakistan Software Testing Board (PSTB) Conference 2016

12. Runner Up 2014
Runner Up in speed programming at the Punjab Youth Festival

13. VC Merit Scholarship 2012
PMAS Arid Agriculture University Rawalpindi

TOOLS AND TECHNOLOGIES

Programming: Python, Keras, Pytorch, Matplotlib (For Image Processing, Computer Vision)
NLTK (For NLP)
Asp.Net, C# (For software development)
Platforms: Linux and Windows

LANGUAGES

English: Professional / Educational Language

Punjabi: Native Language
Urdu: National Language

REFERENCES

Dr. Muhammad Nazir: Ph.D.
Chairman / Associate Professor | Department of Computer Science, International Islamic University Islamabad, Pakistan

Dr. Imran Ashraf: Ph.D.
Associate Professor | Department of Computer Science, Fast NUCES, Islamabad, Pakistan