

**Prof. Dr. Engr. Rizwan Ahmed Khan**  
Chairperson, Department of Computer Science &  
Dean, Faculty of Information Technology

**Specialization:** Computer Vision / Artificial Intelligence

Postdoctoral Fellowship (Computer Vision) – INSA de  
Lyon and Université de Lyon, France.

Ph.D. (Artificial Intelligence) – Université Claude Bernard  
Lyon 1, France.

### **Qualifications**

Master Erasmus Mundus (Informatics) – University of Jean  
Monnet (France) and Gjøvik University College (Norway).

Masters (Computer Engineering) – National University of  
Sciences and Technology (NUST), Islamabad, Pakistan.

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### **Profile**

Dr. Rizwan has received PhD in Computer Science (Computer Vision) from Université Claude Bernard Lyon 1, France. After PhD he worked as a postdoctoral research fellow for more than two years at INSA and LIRIS, Université de Lyon, France. Prior to PhD, he got selected for highly competitive and prestigious European Union Erasmus Mundus scholarship for Masters He has published over 30 research articles in journals and conferences of high repute. He has over twelve years of academia research experience and four years of industry / managerial experience. He also represents Erasmus Mundus Masters course at Erasmus Mundus General Assembly.

### **Research Interests**

1. Image analysis
2. Machine Learning
3. Medical Imaging
4. Ethical Artificial Intelligence / Explainable Artificial Intelligence (XAI)

### **Selected Publications**

#### **Peer Reviewed Journal Articles**

- Anjum Nazir and Rizwan Ahmed Khan. **A novel combinatorial optimization based Feature Selection Method for Network Intrusion Detection.** Computers & Security, Vol 102, March 2021. [[Elsevier](#)] (2019 IF = 3.57) (HEC- HJRS Rank: W- Gold).
- Shahid Munir Shah and Rizwan Ahmed Khan. **Secondary Use of Electronic Health Record: Opportunities and Challenges.** IEEE Access, Vol. 8, Pages 136947 - 136965, Aug 2020 [[IEEE Access](#)] (2019 IF = 3.745) (HEC- HJRS Rank: W- Gold).
- Jamshed Memon, Maira Sami, Rizwan Ahmed Khan and Mueen Uddin. **Handwritten Optical Character Recognition (OCR): A Comprehensive Systematic Literature Review (SLR).** IEEE Access, Vol. 8, Pages 142642 - 142668, Aug 2020 [[IEEE Access](#)] (2019 IF = 3.745) (HEC- HJRS Rank: W- Gold).

- Muhammad Shoaib Jaliawala and Rizwan Ahmed Khan. "**Can Autism be Catered with Artificial Intelligence-Assisted Intervention Technology? A Literature Review**". *Artificial Intelligence Review*, Vol. 53, Issue 2, Pages 1039-1069, Feb 2020 [[SpringerLink](#)] (2019 IF = 5.74) (HEC- HJRS Rank: W- Gold).
- Rumaisah Munir, Rizwan Ahmed Khan. **An Extensive Review on Spectral Imaging in Biometric Systems: Challenges and Advancements**. *Journal of Visual Communication and Image Representation*, Volume 65, 2019. [[Elsevier](#)] (2019 IF = 2.47) (HEC- HJRS Rank: W- Silver).
- Rizwan Ahmed Khan, Crenn Arthur, Alexandre Meyer and Saida Bouakaz. **A novel database of children's spontaneous facial expressions (LIRIS-CSE)**. *Image and Vision Computing*, Volume 83-84, Pages 61-69, 2019 [[Elsevier](#)] (2019 IF = 3.1) (HEC- HJRS Rank: W- Silver).
- Rizwan Ahmed Khan, Alexandre Meyer, Hubert Konik, Saida Bouakaz. "**Saliency based framework for facial expression recognition**". *Frontiers of Computer Science*, Volume 13, Pages 183–198, 2019. [[SpringerLink](#)] [[PDF](#)] (2019 IF = 1.27) (HEC- HJRS Rank: W- Bronze).
- Rizwan Ahmed Khan, Alexandre Meyer, Hubert Konik, Saida Bouakaz. "**Framework for reliable, real-time facial expression recognition for low resolution images**". *Pattern Recognition Letters*, Volume 34, Issue 10, Pages 1159-1168, 2013 [[Elsevier](#)] (2019 IF = 3.25) (HEC- HJRS Rank: W- Gold).

#### Peer Reviewed International Conferences

- Zaki Zahid, Arslan Shaukat, Rizwan Ahmed Khan, Muhammad Usman Akram and Yung-Cheol Byun. **Emotion Recognition in Video Clips Using Simple and Extended Center Symmetric LBP**. In IEEE Transportation Electrification Conference and EXPO Asia-Pacific, Korea 2019. [[IEEE Xplore](#)] [Best Paper Award]
- Arthur Crenn, Alexandre Meyer, Rizwan Ahmed Khan, Hubert Konik, Saida Bouakaz. **Towards an Efficient Body Expression Recognition based on the Synthesis of a Neutral Movement**. In 19th ACM International Conference on Multimodal Interaction (ICMI) (oral presentation. "Honourable mention" award), Glasgow, Scotland 2017. [[ACM Digital Library](#)]
- Rizwan Ahmed Khan, Alexandre Meyer, Saida Bouakaz "**Automatic affect analysis: from children to adults**" In 11th International Symposium on Visual Computing (ISVC) (oral presentation), USA 2015. [[SpringerLink](#)]
- Rizwan Ahmed Khan, Alexandre Meyer, Hubert Konik, Saida Bouakaz "**Pain Detection Through Shape and Appearance Features**" In IEEE International Conference on Multimedia and Expo (ICME) San Jose, California, USA 2013. [[IEEEExplore](#)]
- Rizwan Ahmed Khan, Alexandre Meyer, Hubert Konik, Saida Bouakaz "**Human Vision Inspired Framework for Facial Expressions Recognition**", In 19th IEEE International Conference on Image Processing (ICIP) Orlando, Florida, USA 2012. [[IEEEExplore](#)]
- Rizwan Ahmed Khan, Alexandre Meyer, Hubert Konik, Saida Bouakaz "**Exploring human visual system: study to aid the development of automatic facial expression recognition framework**", In IEEE Conference on Computer Vision and Pattern Recognition (CVPR)- Workshop on Gesture Recognition, Providence, Rhode Island, USA 2012. [[IEEEExplore](#)]