



## DEEPER LOOK: ARTIFICIAL INTELLIGENCE (AI) ACCEPTANCE IN RADIOLOGY

Rehan Babar

University of Calgary, 2500 University Dr NW, Calgary, AB T2N 1N4, Canada

### Abstract:

Ubiquitous computational power. Faster Data processing. Rapid progress of analytic techniques. We are amid major changes all around us and they are happening at an exponential pace. Artificial Intelligence (AI) – which aims to mimic human cognitive functions – is bringing a paradigm shift to the field of radiology. In the last decade, AI techniques known as deep learning have delivered rapidly improving performance in image recognition, caption generation, and speech recognition. Further implementation of AI in radiology will significantly improve the quality, value, and depth of radiology's contribution to patient care and revolutionize radiologists' workflows. However, recent reports of health information technology (IT) show that the acceptance between purchased technologies and clinical work systems is critical in determining intended end users to accept or reject the technology, to use or to misuse it, or to incorporate it into their clinical workflows or work around it. This paper assesses technology implementation frameworks in the context of AI in radiology and employs a widely accepted and validated technology acceptance framework - the Technology Acceptance Model (TAM). The model is built on the premise that when an end-user is introduced to a technology, there are constructs and relationships that influence when and how a user will interact with the technology. In addition, the findings can further inform and provide guidance for policymakers, AI application developers, and business management on the educational needs of radiologists, research and development, and the role of radiologists in moving forward with AI in radiology.

### Biography:

Rehan Babar, 22, is currently completing his Bachelor of Commerce Honours at University of Calgary (UofC) with a specialization in Accounting/Finance and Artificial Intelligence (AI). He has represented UofC in some of the most prestigious management competitions in the



world (Harvard Case Competition, Inter-collegiate Business Case Competition) and has earned a top-3 spot in 5 global competitions. He is among the first 7 students from the Haskayne School of Business to be selected for the prestigious and rigorous Honours research program and has received multiple awards for his research pertaining to AI in the field of radiology.

### Publication of speakers:

1. Suman kumar Bhattacharyya and Kumar rahul." Face Recognition by Linear Discriminant Analysis "International Journal of Communication Network Security, ISSN: 2231 - 1882, Volume-2, Issue-2, 2013
2. P. Phaneendra, V. Ramachandran \and E. Srinivasa Reddy."Human Face Detection and Recognition using PCA" and DCT in HMM. International Journal of scientific Engineering and technology research ISSN 2319- 8885 Vol.04, Issue.35, Pages: 7080-7085, August-2015.
3. Shweta Mehta, Shailender Gupta, Bharat Bhushan." Face recognition using Neuro- Fuzzy Interface System "International Journal of Signal Processing, Image Processing and Pattern Recognition.Vol.7,No.1.July 2014 PP.339-344.
4. Nisha, Sandeep Dahiya. "Face Detection and Expression Recognition using Neural Network Approaches". Global Journal of Computer Science and Technology: F Graphics & Vision Volume 15 Issue 3 Versions 1.0 Year 2015.

[International Conference on Ethicalhacking and Cybersecurity | May 21, 2020 | London, UK](#)

**Citation:** Rehan Babar; DEEPER LOOK: ARTIFICIAL INTELLIGENCE (AI) ACCEPTANCE IN RADIOLOGY ; Cyber Security 2020; May 21, 2020; London, UK