DR. KAMRED UDHAM SINGH

Assistant Professor, School of Computing,
Graphic Era Hill University, Dehradun, Uttarakhand, India
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OBJECTIVE:

I am keen to learn the work culture and procedure of my job profile. I will try to learn the things quickly and implement them in my work for better and easy understanding of the work-related concepts.

EDUCATIONAL PROFILE:

- Completed **PhD** in ***Computer Science and Application*** from **Banaras Hindu University**, Varanasi, India in **2014-2019**.
- Completed **Master of Computer Application** (MCA) from Banaras **Hindu University**, Varanasi, India in **2010-2013**.
- Completed **Bachelor of Computer Application** (BCA) from **University of Lucknow**, Lucknow, India in **2007-2010**.
- Completed **Intermediate (12th)** – ***Science Stream*** from **Board of High School and Intermediate Education** Uttar Pradesh in 2007.

FELLOWSHIPS:

- University Grants Commission, **Junior Research Fellowships** from ***31/12/2014 to 30/12/2016***, India.
- University Grants Commission, **Senior Research Fellowships** from **31/12/2016 to 28/02/2019**, India

Ph.D. THESIS:

Channelized Noise Augmentation for Spectrum Authentication

Description: Advanced medical imaging technologies used sensitive medical equipment like Color Doppler, X-Ray, CT-Scan, etc., generates high-resolution digital imaging formats containing highly sensitive metadata like, colored DICOM images. In this, an attempt has been made to make a way to solve the problem and challenges related to authentication with both color natural images and color DICOM medical images. In the present work, I have developed the watermarking algorithm for DICOM medical images as well as natural images.

CERTIFICATIONS:

- Oracle Certification Program ***"1Z0-007 Introduction to Oracle 9i",*** SQL 2011.
- Oracle Certification Program "***1Z0-042 Oracle Database10g: Administration1"*** , 2012.

MEMBERSHIP:

- International Association of Engineers
- The Indian Science Congress Association
- Member of The Mathematics Consortium.

SOFTWARE SKILLS:

- Languages : Python, Java, C, C++, Html
- RDBMS : Oracle 12C (PL/SQL)
- Operating Systems : Windows XP, 7, 8
- Software/Tools : MATLAB 2019b, OriginPro 2019b, SigmaPlot 14 etc.

RESEARCH AREAS:

- Image Processing
- Medical Image Watermarking
- image steganography

RESEARCH PAPERS / CONFERENCES:

(1) Kamred Udham Singh, Vineet Kumar Singh, Achintya Singhal, "**Color Image Watermarking Scheme Based on QR Factorization and DWT with Compatibility Analysis on Different Wavelet Filters**" Journal of Advanced Research in Dynamical and Control System**s,** Issue: 06- Special Issue, 2018, Pages: 1796-1811 **(Scopus Indexed).**

(2) Kamred Udham Singh, Achintya Singhal, "**Channelized Noise Augmentation to Endorse DICOM Medical Image for Diagnosing"** Journal of Advanced Research in Dynamical and Control System**s,** Issue: 06-Special, 2018, Pages: 2228-2247 **(Scopus Indexed).**

(3) Lalan Kumar & Kamred Udham Singh, "**An Analysis of Different Watermarking Schemes for Medical Image Authentication**", European Journal of Molecular & Clinical Medicine, ISSN 2515-8260, 2020 **(Scopus Indexed).**

(4) Vijay Krishna Pallaw & Kamred Udham Singh, **Medical Image Security Analysis and Enhancement for Telemedicine Applications**, European Journal of Molecular & Clinical Medicine, ISSN 2515-8260, 2020 **(Scopus Indexed).**

(5) Vimal, Vrince, Teekam Singh, Shamimul Qamar, Bhaskar Nautiyal, Kamred Udham Singh, and Abhishek Kumar. "**Artificial intelligence-based novel scheme for location area planning in cellular networks." Computational Intelligence**, Wiley (2020), (**SCI IF-1.19)**.

(6) Chandradeep Bhatt, Indrajeet Kumar and Kamred Udham Singh. "**The state of the Art of Deep**

Learning Models in Medical Science and their Challenges" Multimedia System, Springer, 2020 **(SCI IF-1.6).**

(7) Kumar, Indrajeet, Chandradeep Bhatt, and Kamred Udham Singh. "**Entropy based automatic unsupervised brain intracranial hemorrhage segmentation using CT images**." Journal of King Saud University-Computer and Information Sciences, Elsevier (2020) **(Scopus Indexed)**.

(8) Kamred Udham Singh and Achintya Singhal, **A Synthesis of State-of-the-Art contributions in Digital Image Watermarking**. International Journal of Recent Technology and Engineering, ISSN: 2277-3878, vol. 8, Issue- 1C2, pp. 329-340, 2019 **(Scopus Indexed).**

COMMUNICATED RESEARCH PAPERS

(1) Kamred Udham Singh et al., Secure Watermarking Scheme for Color DICOM Images in Telemedicine Applications, CMC-Computers, Materials & Continua, ISSN:1546-2226, in 3rd revision (2020) (SCI IF- 4.89).

(2) Kamred Udham Singh et al., Security Enhancement and Detection of Fake COVID-19 NIFTI CT-Scan images, Journal of Experimental & Theoretical Artificial Intelligence, Taylor and Francis, communicated, in review (2020), (SCI IF- 2.11).

(3) Kamred Udham Singh et al., Authentication of CT-Scan and MRI Images in NIFTI Format Using Watermarking, multimedia tools and applications, Springer, communicated (2020), (SCI IF- 2.3).

(4) Abhishek Kumar and Ankit Kumar, Kamred Udham Singh and Teekam Singh, Performance Evaluation for Handover Latency Reduction Using Modified TIMIP Algorithm, CMC-Computers, Materials & Continua, ISSN:1546-2226, communicated (2020), (SCI IF- 4.89).

(5) Abhishek Kumar and Ankit Kumar, Kamred Udham Singh and Teekam Singh, Design and Implementation of Opinion Polarization for Sentiment Analysis, CMC-Computers, Materials & Continua, ISSN:1546-2226, communicated (2020), (SCI IF- 4.89).

(6) Vrince Vimal, Kamred Udham Singh, Clustering Isolated Nodes to Enhance Network Life Time of WSNs for IOT Applications, IEEE Systems, communicated (2020), (SCI IF- 3.9).

(7) Indrajeet Kumar, Vrince Vimal, Kamred Udham Singh,Abhishek Kumar, Dense Tissue Pattern Characterization using Deep Neural Network, Cognitive Computation, Springer, communicated (2020), (SCI IF- 4.9).

(8) Indrajeet Kumar, Jyoti Rawat, Kamred Udham Singh,Abhishek Kumar, Analysis and Characterization of COVID-19 using CT Chest Images and Deep Convolutional Neural Networks, Materials & Continua, ISSN:1546-2226, communicated (2020), (SCI IF- 4.89).

PAPER PRESENTED IN CONFERENCES NATIONAL/INTERNATIONAL:

(1) Presented a paper Entitled "***Region Based Method for Image Segmentation Using 4- Adjacency Rule***" in three days International Conference on "**Advances in Computing, Control and Communication Technology**" Organised by Centre of Computer Education, Institute of Professional Studies, University of Allahabad.

(2) Presented a paper Entitled "***Non-Blind Image Watermarking Scheme Based on Logistic and Lorentz Chaotic Maps***" in "**International Conference of The Indian Mathematics Consortium (TIMC) in Cooperation with American Mathematical Society (AMS)"**, Organised by DST-CIMS, Banaras Hindu University in Dec 14 – 17, 2016.

(3) Presented a paper Entitled "***A Color Image Watermarking Scheme Based on QR Factorization and LL Chaos***" in "One-day National Conference on Recent Advances in Mathematical Sciences", DST-CIMS, Banaras Hindu University, Varanasi, on April. 22, 2018.

(4) Presented a paper Entitled "***A Color DICOM Image Watermarking for Telemedicine Application Based on LWT, MSVD and LU Factorization***" in "International Conference on Innovative Trends in Science and Technology", Organised by Sarabhai Institute of Science and Technology, Thiruvananthapuram, on Nov. 27, 2018.

BOOKS & CHAPTERS IN BOOKS:

(1) Dr. A. Singhal, Kamred Udham Singh, V. K. Singh, "C lab manual for undergraduate students" Sara Book Publication Gujarat, India, ISBN: 978-1-63040-851-0.

(2) Dr. Achintya Singhal, Kamred Udham Singh, "Region Based Methods for Image Segmentation Using4-Adjacency Rule" chapter in book "Advances in Computing, Control & Technology Communication" Allied Publishers, New Delhi, India, ISBN: 978-93-85926-20-4 pp. 222-227.

INDIAN PATENT:

(1) Analyze the Signal Strength of A Car Device

(2) Covid-19 Kit: Intelligent Thermal Scanning Kit For Testing The Covid-19 Positivity And Displayingb Real Time Count Of Positive Case Using Iot

EXPERIENCES:

- Two years teaching experience in Department of Bioinformatics (MSc), Mahila Mahavidyalaya, Banaras Hindu University, Varanasi.
- Six months teaching experience in Computational Science and Applications in Signal Processing (MSc) at DST-Centre for interdisciplinary Mathematical Sciences, Institute of Science, Banaras Hindu University, Varanasi.
- 1.5 years teaching experience School of Computing, Graphic Era Hill University, Dehradun, Uttarakhand, India

PERSONAL PROFILE:

Name	:	Kamred Udham Singh
Father's Name	:	Shri Hridaya Narayan
Mother's Name	:	Smt. Saraswati Devi
Date of Birth	:	03/Aug/1989
Nationality	:	Indian
Sex	:	Male
Languages Known	:	English & Hindi
E-mail	:	kamredudhamsingh@gmail.com