

CURRICULUM VITAE













Dr. SUNIL KUMAR CHAWLA, PhD, SMIEEE

Head Academic Operations (Value Added Courses) at CSED, CUIET, Chitkara University, Punjab

OBJECTIVE STATEMENT – Eager to apply and upgrade my skills and knowledge simultaneously being an asset to the organization served.

Qualifications

Qualification	University	Percentage	Div.	Year
PhD (CSE)	I. K. G. Punjab Technical University, Jalandhar, Punjab	80.5% (CW)	1 st	2021
M. Tech. (IT)	M. M. (Deemed to be) University, Mullana, Haryana	6.7 CGPA	2 nd	2011
B. Tech. (CSE)	Kurukshetra University, Kurukshetra, Haryana	65.48%	1 st	2004
XII	OSDAV Public School, Kaithal, Haryana / CBSE, New Delhi	68.4%	1 st	2000
X	SBV High School, Kaithal, Haryana / HBSE, Bhiwani, Haryana	71.66%	1 st	1998

Symbol	Link / ID/ Detail	Remarks (if any)
	drskchawla.1983@gmail.com	
	+91-9896439120	
	https://orcid.org/0000-0001-5316-3039	
	https://sites.google.com/view/drskchawla/home	
	https://in.linkedin.com/in/sunil-chawla-4501876a	
	https://scholar.google.com/citations?hl=en&authuser=1&user=n0FqM_4AAAAJ	H-index – 07 i10 index – 06 # of Citations – 226 #of documents – 45
	3653020	# of documents – 05
	A-1157-2013	# of documents – 25
	https://www.researchgate.net/profile/Sunil_Chawla2	Pulications-39 H-index: 06 Reads: 23,383 Research Interest: 270.2 Citations: 198
	https://www.scopus.com/authid/detail.uri?authorId=57213856115	# of citations – 93 # of documents – 22 H index – 04
	https://vidwan.inflibnet.ac.in/profile/196639	Vidwan Score – 7.5
	https://publons.com/researcher/1361943/sunil-chawla/	Verified Reviews – 11

Research Interests: Digital Image Processing, Biometrics, Iris Recognition, Soft Biometrics, Machine Learning, Artificial Intelligence

Academic Interests: NBA, NIRF, OBE, Advanced Teaching Pedagogies, Strategic Planning, NEP-2020, SDGs

Recent Subjects Taught: Fundamentals of Logic Programming, Programming in C and C++, Data Structures and Algorithms, Design and Analysis of Algorithms, Operating System, Content Management System and Software Engineering.

QUALIFICATION EXPERIENCE:

Name Of the Organization	Post held	Duration
Chitkara University, Rajpura, Punjab, India	Assistant Professor - III	2 nd Feb 2023 to till Date (1 year 4 month)
Chandigarh University, Mohali, Punjab, India	Assistant Professor	22 nd Jan 2021 to 1 st Feb 2023 date (2 years)
CGC-College of Engineering, Landran, Mohali, Punjab, India	Assistant Professor	27 th June 2016- 28 Dec. 2020 (4 years 6 months)
Haryana College of Technology & Management, Kaithal, Haryana, India	Assistant Professor	07 th Aug. 2006 to 25 th June 2016 (9years 11 months)
Doon Valley Institute of Engineering & Technology, Karnal, Haryana, India	Lecturer	1st Aug. 2005 to 31 st July 2006 (1 year)
Scancomm Solutions Pvt Ltd, Noida	Jr. Software Developer	Oct 2004 to May 2005 (8 months)

PhD Thesis: *Emerging Covariates of Iris Recognition*

Supervisor: *Dr. Vijay Kumar Lamba, Principal and Professor, GCET, Ropar, Punjab, India*

Co-Supervisor: *Dr. Surender Jangra, Associate Professor, GTB College, Sangrur, Punjab, India*

M.TECH. DISSERTATION: *Study and Development of Iris Segmentation and Normalization Technique*

Supervisor: *Dr. Aashish Oberoi, Assistant Professor, MMEC, M. M. Deemed to be University, Mullana, Ambala, Haryana.*

AUTHORED BOOK:

Title: Segmentation and Normalization of Iris for Human Recognition, LAP Lambert Academic Publication, Germany, ISBN10: 613988876X, ISBN13: 978-613-9-88876-4, Published on 14th August 2018, No. of Pages - 112, Price 54.90 €.

EDITED BOOKS:

- Industry 4.0, AI, and Data Science Research Trends and Challenges Edited By Vikram Bali, Kakoli Banerjee, Narendra Kumar, Sanjay Gour, and Sunil Kumar Chawla; ISBN 9780367562854, Published July 2021 by CRC Press, 282 Pages, 107 B/W Illustrations.
- Handbook of Sustainable Development Through Green Engineering and Technology Edited By Vikram Bali, Rajni Mohana, Ahmed A. Elngar, Sunil Kumar Chawla, and Gurpreet Singh, published by CRC Press, Taylor & Francis Group, September 2022, ISBN 9781003127819, 344 Pages.

- **Industrial Internet of Things Security: Protecting AI-Enabled Industrial Engineering in Cloud and Edge Environments** Edited by Sunil Kumar Chawla, Neha Sharma, Ahmed Elnger, Prasenjit Chatterjee, P Naga Srinivasu, to be published by CRC Press, Taylor & Francis Group, October 2024.

RESEARCH OUTREACH AND EXPOSURE –

- Reviewer Journal of Advances in Medicine and Medical Research (JAMMR), IJSPPC (IGI Global), IJISMD (IGI-Global), IEEE Access (IEEE), IJDCF (IGI Global), IET Biometrics, IJMDEM (IGI Global), IJAEIS (IGI Global), Recent Patents on Engineering (Bentham Science), IJCTA, IJCRT, Kerbala International Journal of Modern Science (KIJoMS).
- Reviewer of Two Edited Books for IGI Global, USA and CRC Press, Taylor & Francis, UK.
- Reviewer for International Conferences – ACDSA 2024, ICACCT 2023, CISES 2023, ICCIMA 2023, ICICC 2022, ICMNWC 2022, PDGC 2022, ANTIC 2022, IEEE-MysuruCon 2022, ANTIC 2021, AICTC 2021, IEEE-MysuruCon 2021, ICNGIoT 2021, ICCSEA-2020, WITCON ECE 2019, AICTC – 2019, ICRTIB-2019, MIDAS 2020 and many more.
- TPC Member for International Conferences – AIoT4S-2024, ICACCT 2023, CISES 2023, PDGC-2022, CIEMA-2022, ICNGIoT-2021, PCCDS-2021, ICCSEA 2020, ICRTIB 2019, IoT-SIU 2018, RAACE2017, NGCT 2017, ICIC 2017, IACCA 2017.
- Co-Convener, Reviewer, and Session Chair for a series of three International Conferences at CGC College of Engineering– ICIC 2017, ICIC 2018, ICIC 2019.
- Guest Editor, *Special Issue on Applicational Role of Big Data in Engineering and Management* in International Journal of Multimedia Data in Engineering and Management (IJMDEM), ESCI, IGI Global. Vol. 11 No. 1, 2020.
- Guest Editor, *Special Issues on Innovations in System Design and Methodologies*, IJISMD, IGI Global, Scopus, ESCI, February 2020, September 2020.
- Guest Editor, Special Issue on Image Processing using Machine Learning in International Journal of Image and Graphics, World Scientific Publishing, Vol. 22, No. 3, May 2022, SCOPUS, ESCI.
- Authored Book Chapter entitled “*Application view towards Blockchain: Demystifying the Myths*” published in book entitled *Cryptocurrencies and Blockchain Technologies and Applications*; Wiley-Scrivener Publications. ISBN - 978-1-119-62116-4, Published in June 2020.
- *Program Chair cum Session Chair – ICACCT 2021 held at CSED, Chandigarh University from 30th – 31st Oct 2021.*
- *Organized one week FDP on Machine Learning, Deep Learning and Natural language Processing Toolkit with Hand-on Practice as Coordinator during 2nd August – 6th August 2021 at CSED, CU.*
- *Organized Expert Talk on Image Processing, Analysis, and Applications with Research Directions and Perspectives (17th April 2021) Distinguished Speaker - Dr. Nilanjan Dey, Associate Professor, JIS University, West Bengal.*
- *Organized Expert Talk on Innovative Python GUI Programming with Tkinter: Hands on by Ms. Harneet Kaur, Founder Splendours Coders, 19th December 2023 at CSED, CUIET, Chitkara University, Rajpura, Punjab.*
- *Organized Expert Talk on Developing Innovative Serverless Generative AI applications using Amazon Bedrock by Dr. Abhilasha R Vyas and Ms. Shruti Bijawat, BU Head(s), CloudThat, Bangluru on 24th April 2024 at CSED, CUIET, Chitkara University, Rajpura, Punjab.*

PERSONAL DEVELOPMENT / OUTREACH (2023-2024)

Title	Venue	Organized By	Date	Remarks	Role
Presented a Poster in International Symposium on Advancing Automation, Decision Making, and Sustainable Innovation with Artificial Intelligence and Computer Vision	DCSE, Chitkara University, Punjab	DCSE, Chitkara University, PB	19.04.2024-20.04.2024	Poster Title: Human Identification through Multimodal recognition system using face and iris biometrics	Participant
Guru Dakshta – Faculty Development Programme	Chitkara University, Punjab	Chitkara University, PB	September 2023 – May 2024	06 Sessions	Participant
Recent Advances & Future Trends in AI, Computer Vision & NLP	Chitkara University, Punjab	EICT Academy, IIT Roorkee in association with CSED, CUIET, Chitkara University, PB	30.10.2023 – 04.11.2023	6 Days	Participant
5-Days International FDP on Unleashing Emerging Research Trends and Advancements in Computer Science 2.0	Online	SCSE, VIT-AP University, Amaravati, AP	24.07.2023-28.07.2023	5 Days	Participant
One week Faculty Development Program on Unlocking Potential: Maximizing Impact via Technology Transfer Publications, Consultancies & Intellectual Property Management	Chitkara University, Punjab	CSED, CUIET, Chitkara University, Punjab in association with CURIN, Chitkara University, PB	02.01.2024 – 06.01.2024	5 Days	Participant
International Symposium on Interventions and Innovations for Diabetes Management (IIDM - 2023)	Chitkara University, Punjab	Chitkara School of Health Sciences in collaboration with CURIN, Chitkara University, PB	30.11.2023	1 day	Delegate

PERSONAL DEVELOPMENT / OUTREACH (2020-2022)

Title	Venue	Organized By	Date	Remarks
One week Online Certification Course on Digital Teaching Techniques	Online	ICT Academy	07/12/2020 - 12/12/2020	ATOS/Syntel Certified Digital Teacher
AICTE recognized FDP on Image and Embedded Processing	NITTTR, Chandigarh	MHRD, India	Online	1 week
Guru Dakshta – Phase 1: Implementation of National Education Policy 2020: Role of Faculty in higher education Institutions	UITTTR, CU, Mohali	Chandigarh University, PB	Online	1 week
Machine Learning, Deep Learning and Natural language Processing Toolkit with Hand-on Practice	CSED, UIE, Chandigarh University, Mohali	Chandigarh University, PB	02.08.2021 - 06.08.2021	5 Days
Orientation Cum FDP on Privacy Management	CSED, UIE, Chandigarh	Chandigarh University, PB	01/02/2021-05/02/2021	5 Days

	University, Mohali			
5 Days FDP on Artificial Intelligence and Machine Learning	ICFAI University, Jaipur	ICFAI-Tech, The ICFAI University	28/06/2021-02/07/2021	5 Days
Guru Dakshta – Phase 2: Implementation of National Education Policy 2020: Role of Faculty in higher education Institutions	Chandigarh University, Mohali	Chandigarh University, PB	20/12/2021-24/12/2021	5 Days
Workshop on Outcome Based Education for Leadership	Chandigarh University, Mohali	Chandigarh University, PB	05.01.2022-08.01.2022	4 days
5 Days FDP on Research Essentials	CSED, Chandigarh University	Chandigarh University, PB	31.01.2022-05.02.2022	5 Days
Modular Curriculum Design	CSED, Chandigarh University	Chandigarh University, PB	07.03.2022	1 Day
International Accreditation – Awareness Sessions	Chandigarh University	Chandigarh University, PB	08.03.2022-10.03.2022	3 Days
AICTE recognized FDP on Image and Embedded Processing	NITTTR, Chandigarh	MHRD, INDIA	Online	1 week

LOCKDOWN ENGAGEMENTS (2020-2021) –

Webinar / Certification	Organizer	Dates	Level
Webinar on How to Write a good Research Proposal	Punjabi University Patiala in association with IIT, Kanpur	31st May 2020	National
Webinar on Transitioning to Data Science	Analogica	16th May 2020	National
Certificate Course on Getting Started with AWS Machine Learning	AWS on Coursera	5th August 2020	International
Webinar on Digital Transformation	Poornima Institute of Engineering and Technology, Jaipur	29th May 2020	National
One week Online International FDP on Novel Approaches on Blockchain Technology & its Applications	Faculty of Engineering and Computer Sciences, TMU, Moradabad	22nd – 28th May 2020	International
Programming for Everybody (Getting started with Python)	University of Michigan and Coursera	15th June 2020	International
Step into Robotic Process Automation	Guvi	29th May 2020	National
Beginner's guide to writing a manuscript in LaTeX	Elsevier's Researcher Academy	24th April 2020	International
Research Collaborations	Elsevier's Researcher Academy	22nd April 2020	International
International Webinar on Futuristic Information Communication Technologies (FICT)	CSI Jaipur Chapter	10th May 2020	International
Webinar on Preparing and Publishing a Scientific Manuscript	Galgotias College of Engineering and Technology, Greater Noida, UP	22nd May 2020	National
Certificate Course on ANN Made Easy (5.5Hrs)	Udemy	12th April 2020	International
Python 3.4.3	Spoken Tutorial Project, IIT Bombay	24th April 2020	National
RPA Design and Development v1.0 – Educator Readiness Program	UiPath Academic Alliance	11th May-20 th May 2020	International

E-Panel Discussion on Online Learning and its Positive and Negative Impact on Future Generation Education	ISM, Patna	14 th May 2020	International
5 Days Webinar Series : Beyond The Boundaries : Reinventing Horizons	SKIT, Jaipur	16th – 20th May 2020	National
5 Days Online FDP on R Programming	Indo Global Group of Colleges, New Chandigarh in association with IIT Bombay under MHRD Project	27 th April – 1 st May 2020	National
National Webinar on Mentoring Teachers for Effective Online Teaching	Daulat Ram College, University of Delhi	4 July 2020 [*]	National
Webinar on Trends in Artificial Intelligence: A Modern Perspective	St. Joseph Institute of Technology in association with IEEE CS Madras, ACM Chennai and Wiley India	28 th May 2020	National
Webinar on Collaboration between Indian and Foreign Universities: Legal and Regulatory Framework	EduLegal	18 th June 2021	National

PERSONAL & PROFESSIONAL DEVELOPMENT (2015-2019):

Title	Organizer	Sponsor	Venue	Duration	Start Date	End Date	Role
Two Week ISTE Workshop on Design and Analysis of Algorithms	IIT Kharagpur	NMEICT, MHRD	HCTM Kaithal	02 weeks	27.04.15	30.05.15	Participant
Two Week ISTE Workshop on Control Systems	IIT Kharagpur	NMEICT, MHRD	HCTM Kaithal	01 week	25.5.15	30.5.15	Participant
AICTE recognized STC on Instructional Planning and Delivery (Module III : Student Evaluation Through ICT)	EEMD, NITTTR Chandigarh	NMEICT, MHRD	HCTM Kaithal	01 week	16.11.15	20.11.15	Participant
ISTE STTP on Introduction to Structural Engineering	IIT Kharagpur	NMEICT, MHRD	HCTM Kaithal	02 weeks	30.11.15	09.01.16	A-View Coordinator
Regional Workshop on Research Based Pedagogical Tools	Centre of Excellence in Science & Mathematics Education, IISER, Pune	DBT, MST, GoI	GGI, Ropar	03 days	01.06.17	03.06.17	Participant
Emerging Ideas for Teaching Pedagogy for Industry Interaction Interface	CGC, Landran	CGC, Landran	CGC, Landran	02 weeks	27.06.16	08.07.16	Participant
IBM Software Training under Career Education Program (Cognitive Analysis,	CGC, Landran	IBM CEP	CGC, Landran	02 weeks	31.10.17-03.11.17, 19.12.17-22.12.17, 28.05.18-31.05.18		Participant

Descriptive Analysis, Big Data Analytics using Cognos)							
Prayaas - Machine Learning Workshop	CGC COE	CGC, Landran	CGC COE	02 days	09.09.17	10.09.17	Organizer
App Development through ICT	ETC, NITTTR Chandigarh	MHRD	CGC COE	01 week	19.11.18	23.11.18	Participant
E-Governance and Green Technology Entrepreneurship for Technical Institutions through ICT	EDICD, NITTTR Chandigarh	MHRD	CGC COE	05 days	19.02.18	23.02.18	Participant
Outcome based Curriculum through ICT	CDC, NITTTR Chandigarh	MHRD	CGC COE	01 week	25.06.18	29.06.18	Participant
Linux administration using centos through ICT	CSED, NITTTR Chandigarh	MHRD	CGC COE	01 week	30.04.18	04.05.18	Participant
Virtual labs	Virtual Labs : IIT Delhi	NMEICT, MHRD	CU, Gharuan	01 day	06.09.18	06.09.18	Participant
Curriculum Implementation through ICT	CDC, NITTTR Chandigarh	MHRD	CGC COE	01 week	25.02.19	01.03.19	Participant
Introduction to Artificial Intelligence	NITTTR Kolkata	MHRD	CGC COE	01 week	06.05.19	10.05.19	Participant
Rural Development through ICT	NITTTR Kolkata	MHRD	CGC COE	01 week	29.07.19	02.08.2019	Participant
Problem Based Learning	NITTTR Kolkata	MHRD	CGC COE	01 week	02.12.2019	06.12.2019	Participant
Water Pollution and Health	NITTTR Kolkata	MHRD	CGC COE	01 week	21.10.2019	25.10.2019	Participant

PERSONAL DEVELOPMENT / OUTREACH (BEFORE 2015)

Title	Venue	Organized By	Date	Remarks
National Workshop on "Evolutionary Trends in IT"	HCTM, Kaithal	Deptt. of Information Tech.	April 3rd, 2007	Participant
FDP on "Storage Technology Foundations"	Amity Campus, Noida	EMC2 Global Services & Prod. Department	July 16th -20th, 2007	Participant
STP on "Effective Teaching"	HCTM, Kaithal	Edu. & Edcl. Mgt. Deptt. NITTTR, Chd.	July 30th – 3rd Aug., 2007	Participant
STP on "Webpage Designing"	NITTTR, Chandigarh	Comp. Sc. Department	May 28th – 1st June, 2007	Participant
STP on "AICTE Sponsored Induction Training Programme for Faculty of Engg. Colleges"	HCTM, Kaithal	Edu. & Edcl. Mgt. Deptt. NITTTR, Chd.	Jan 21st – Feb 1st 2008	Participant
A 2-days National Workshop on "Soft Computing"	SKIET, KKR	Deptt. of Comp. Sc. & Engg.	March 10th – 11th, 2008	Participant

National Conference on “Computer Applications”	HCTM, Kaithal	Deptt. of Comp. Sc. & Engg.	March 06, 2008	Participant
National Workshop on Network Security & Cryptography (NSCRY-09)	HCTM, Kaithal	Deptt. of Comp. Sc. & Engg.	Feb. 27th – 28th 2009	Participant
A TEQIP sponsored National workshop on Network and Information Security (NIS-09)	D.C.R.U.S.T., Murthal	Deptt. of Comp. Sc. & Engg.	March 6th, 2009	Participant
National Seminar on “Emerging Trends in Computer and Information technology”	GMN College, Ambala Cantt.	Deptt. of Computer Science	March 7th, 2009	Participant
National Workshop on “Open Source Technologies & Security Issues”	HCTM, Kaithal	Deptt. of Information Tech.	April 3rd – 5th 2009	Participant
National Workshop on “Advanced Developer Technologies”	GIMT, Kurukshetra	Deptt. of Comp. Sc. & Engg.	April 11th 2009	Participant
National Workshop on “Network Security”	SKIET, Kurukshetra	Deptt. of Comp. Sc. & Engg.	April 18th - 19th 2009	Participant
Workshop on Ethical Hacking & Information Security	HCTM, Kaithal	Deptt. of Information Technology	April 11th - 12th 2012	Faculty
National Workshop on “Research Methodology”	HCTM, Kaithal	Deptt. of Comp. Sc. & Engg.	30th April 2012	Participant
National Workshop on “Research Techniques in Science & Engineering”	HCTM, Kaithal	Deptt. of Comp. Sc. & Engg.	20th March 2014	Participant
ISTE-PTU Sponsored FDP on Emerging Trends & Physics in Nano Electronics & Material Design	GCET, Anandpur Sahib	Deptt. of Electronics & Comm.	28th April – 2nd May 2014	Participant
National Workshop on Research Trends in Science & Engg.	HCTM, Kaithal	Deptt. of Comp. Sc. & Engg.	20th March 2014	Organizing Committee Member
Two Week ISTE workshop on Fluid Mechanics conducted by IIT Kharagpur under NMEICT(MHRD)	HCTM, Kaithal	Deptt. of Mech. Engg.	20th - 30th May 2014	Teaching Assistant
Two Week ISTE workshop on Computer Programming conducted by IIT Bombay under NMEICT(MHRD)	HCTM, Kaithal	Deptt. of Comp. Sc. & Engg.	20th May - 21st June 2014	Participant
Two Week ISTE workshop on Computer Networking conducted by IIT Bombay under NMEICT(MHRD)	HCTM, Kaithal	Deptt. of Comp. Sc. & Engg.	28th May - 5th July 2014	Participant
Two Week ISTE workshop on Control Systems conducted by IIT Kharagpur under NMEICT(MHRD)	HCTM, Kaithal	Deptt. of Electrical & Electronics Engg.	2nd Dec. - 12th Dec. 2014	Participant

RESEARCH GUIDANCE:

FUTURE PAPERS

- Paper Entitled “Research Insights on Soft Biometrics: Challenges, Issues and Future Directions” is in progress.
- Paper Entitled “Apple Disease Detection using Deep Learning Techniques” is under preparation.
- Paper Entitled “Technical Discussion on Detection of Cerebral Palsy Disorder using Artificial Intelligence Techniques” is under preparation.
- Book Chapter entitled Navigating Compliance in the Industrial IoT Landscape: Frameworks, Security, Standards, and Ethical Considerations accepted in the Book entitled Industrial Internet of Things Security: Protecting AI-Enabled Engineering Systems in Cloud and Edge Environments, CRC Press, T&F, UK.

RESEARCH PUBLICATIONS:

1. Book Chapter entitled Blockchain based Decentralized Biometric Authentication System for Vulnerability Analysis accepted in ‘Artificial Intelligence Technology in Healthcare: Security and Privacy Issues, CRC Press, T&F, UK
2. Paper entitled Stress Detection using Machine Learning Techniques: A Review published in 5th IEEE Conference on Advances in Computing, Communication, Control and Networking (ICAC3N 2023) held on 15-16 December 2023. (Scopus)
3. Paper entitled Digit Recognition by the implementation of Supervised Learning using a Convolutional Neural Network accepted in ICTACS 2023. (Scopus)
4. Book Chapter entitled A Thorough Analysis on Mitigating the Risk of Gastric Cancer using Proper Nutrition accepted in Securing Next Generation Connected Healthcare Systems Using Artificial Intelligence Technologies Eds. Deepak Gupta, Aboul Ella Hassanien, Paperback ISBN: 9780443139512, eBook: ISBN: 9780443139529, Elsevier, May 1st 2024. (Scopus)
5. Paper entitled A Review on Quantum Key Distribution: Principles, Protocols and Security Analysis published in proceedings of International Conference on Recent Developments in Cyber Security (In: Roy, N.R., Tanwar, S., Batra, U. (eds) Cyber Security and Digital Forensics. REDCYSEC 2023.), Lecture Notes in Networks and Systems, Vol. 896, pp. 541-550, 2024 (Scopus)
6. Paper entitled Language Identification using Multinomial Naïve Bayes Technique accepted at 4th International Conference on Data Analytics and Management (ICDAM 2023) organized by LMU, London, UK and KUAS, Poland, Europe and BPIT, GGSIPU, New Delhi on June 23-24, 2023. (Scopus)
7. Paper entitled Cognitive Inspired & Computationally – Intelligent Early Melanoma Detection using feature analysis Techniques published in Journal of Artificial Intelligence and Technology, Vol.3, No. 4, pp. 215-224, 2023, doi: <https://doi.org/10.37965/jait.2023.0334>. (Scopus)
8. Paper entitled Convolutional Neural Network based Deep Learning Method for Fruit Classification using accepted in ICAAIML-2023: International Conference on Advances and Applications of Artificial Intelligence and Machine Learning (Scopus)
9. Paper entitled “IoT Networks: Security Vulnerabilities of Application Layer Protocols” published in proceedings of 14th International Conference on Mathematics, Actuarial, Computer Science, & Statistics (MACS 14) to be held on November 12 & 13, 2022 at IoBM, Karachi, Pakistan. (Scopus)
10. Book Chapter entitled “A Taxonomy on Smart Grid Technology” published in HANDBOOK OF SUSTAINABLE DEVELOPMENT THROUGH GREEN ENGINEERING AND TECHNOLOGY, CRC Press, Taylor and Francis, UK.

11. Paper entitled Diagnosing COVID-19 from Chest CT Scan Images using Deep Learning Models: Detection of Covid-19 from CT scan images published in International Journal of Reliable and Quality E-healthcare, Volume 11, Issue 2, pp. 1-15 (Scopus, ESCI). DOI: 10.4018/IJRQEH.299961
12. Paper entitled "Clustering based Contact Tracing Analysis and Prediction of SARS-CoV-2 Infections", published in EAI Endorsed Transactions on Scalable Information Systems, sis 18: e19, 2021 DOI: 10.4108/eai.3-11-2021.171756 (SCOPUS)
13. Paper entitled "BioPay: A Secure Payment Gateway through Biometrics", published in Journal of Cybersecurity and Information Management (JCIM), Vol. 7, No. 2, PP. 65-76, 2021.
14. Paper entitled A Hybrid Approach for Feature Selection Based on Genetic Algorithm and Recursive Feature Elimination published in International Journal of Information System Modeling and Design (IJISMD) Vol. 12, issue 2, 17-38, 2021 (SCOPUS, ESCI)
15. Paper entitled "Virtual Private Network Flow Detection in Wireless Sensor Network using Machine Learning Techniques" published in International Journal of Sensors, Wireless Communication and Control, Bentham Science. (SCOPUS)
16. Paper entitled "Best VM Allocation and Minimum Migration Technique based upon Distance Aware VM Migration with minimum Service Level Agreement Violations" published in ICAML 2020 for publication in AMSJ, Published by Union of researchers of Macedonia (SCOPUS)
17. Paper entitled "An algorithm to recognize and classify circular objects from image on basis of their radius" published in proceedings of ICRIC 2020. (SCOPUS)
18. Paper entitled Corona Virus-SARS-CoV-2: An Insight to Another way of Natural Disaster, published in EAI Endorsed Transactions in Pervasive Health and Computing, Vol. 20 No. 2, May 2020. (SCOPUS)
19. Paper entitled ANTI-SPOOFING FOR IRIS RECOGNITION WITH CONTACT LENS DETECTION published in AAMS, Mili Publication, Allahabad, India, 2019. (ESCI)
20. Paper entitled Cloud Based Mining: A New Approach for Suggestions published in AAMS, Mili Publication, Allahabad, India, 2019. (ESCI)
21. Paper entitled A Survey on Character Recognition from Handwritten Documents, published in AAMS, Mili Publication, Allahabad, India, 2019. (ESCI)
22. Paper entitled "Internet of Things for Smart Environment Applications" published in AAMS, Mili Publication, Allahabad, India, 2019. (ESCI)
23. Paper entitled "A Comprehensive Study of Periocular Biometrics on Iris Recognition" published in *International Journal of Control and Automation*, Vol 12, No. 5, 2019. (SCOPUS)
24. Paper entitled "A Journey from IoT towards CoT: Future of Things", published in *International Journal of Control and Automation*, Vol 12, No. 5, 2019. (SCOPUS)
25. Paper entitled "Hadoop Trust Management for Mobile Cloud Computing Security", published in *International Journal of Control and Automation*, Vol 12, No. 5, 2019. (SCOPUS)
26. Paper entitled "Modeling of Electrical Properties of SEDS", published in *International Journal of Control and Automation*, Vol 12, No. 5, 2019. (SCOPUS)
27. Paper entitled "ILivSpot: Secure Biometric System based on Iris Liveliness Detection" published in *International Journal of Engineering and Advanced Technology*, Vol. 9, issue 2, 2019. (SCOPUS)
28. Paper entitled "EAgeBios: Enhanced Biometric System to handle the Effects of Template Aging" published in *International Journal of Innovative Technology and Exploring Engineering*, Vol. 9, Issue 1, 2019. (SCOPUS)
29. Paper entitled "Image Quality Analysis of Segmented Iris using Filters" published in *International Journal of Recent Technology and Engineering*, Vol. 7, No. 5, pp. 279-296, 2019. (SCOPUS)

30. Paper entitled "HIBERNATE, An ORM Framework for Accessing Database," published in *International Journal of Engineering Development and Research*, Vol.7, Issue 3, pp. 156-160, 2019. ISSN: 2321-9939.
31. Paper entitled Insights to Big Data and Hadoop: An Introductory Review, published in *Journal of Communication Engineering & Systems*, Vol. 9, Issue 2, pp. 69-75, 2019, ISSN: 2249-8613.
32. Paper entitled "Synthetic Iris as a Vulnerability of Iris Recognition" published in *Journal of Image Processing & Pattern Recognition Progress*, Vol. 5, No. 3, pp. 15-21, 2018.
33. Paper entitled "A Comparative Study of Various Cloud Service Platforms" published in *Journal of Advanced Database Management & Systems*, Vol. 6, Issue 1, pp. 7-12, 2019.
34. Paper entitled "Effective CBIR System using Color Histogram and Distance Measures" published in *Journal of Web Engineering & Technology*, Vol. 6, Issue 1, pp. 11-14, 2019.
35. Paper entitled "Single Page Application: Architecture and Application" published in *Recent Trends in Programming Languages*, Vol. 6, Issue 1, pp. 27-30, 2019.
36. Paper entitled "Existing and Emerging Covariates of Iris Recognition" published in *International Journal of Computer Sciences and Engineering*, Vol.7, Issue.6, pp.140-146, 2019. (UGC Approved)
37. Paper entitled "On Cloud Security using Biometric Cryptographic Techniques" published in *Conference Proceedings of ICIC 2017 in Circulations in Computer Science*, NY, USA, pp. 1-4, 2018, ISSN: 2456-3692.
38. Paper entitled "Geocast Routing in Vehicular AdHoc Networks: A Survey" published in *International Journal of Computer Science and Information Technology*, Volume 5, No. 4, 2014, pp. 5365-5370. ISSN: 0975-9646.
39. Paper entitled "Comparative Survey of Various Iris Recognition Algorithms" published in *International Journal of Computer, Communication and Information Technology*, Volume 1, No. 1, September 2013.
40. Paper entitled "A Robust Algorithm for Iris Segmentation and Normalization using Hough Transform" published in *Proceedings of 5th International Conference on Advanced Computing and Communication Technologies held on 5th November 2011 at APIIT – SD, Panipat (Hr.) (IEEE)*
41. Paper entitled "A Robust Segmentation method for Iris Recognition" published in *International Journal of Advanced Research in Computer Science* Volume 2, No. 5, Sept.-Oct. 2011 pp. 340 – 343.
42. Paper entitled "Knowledge Management with the skills of Business Intelligence," published in *International Journal of Information Technology and Knowledge Management*, Vol.1, No. 1, pp. 63-70, 2008, ISSN: 0973-4414.
43. Paper entitled "Upholding a Graphical Debugger over an Action Equation" published in National Conference on "*Computer Applications*" held on 6th March 2006.
44. Paper entitled "Quality of Services with multipath protocols" published in National Conference on "*Computer Applications*" held on 6th March 2006.

CONFERENCE SPECIAL SESSIONS

- Special Session as Session Chair on Research Trends in Computational Intelligence, Data Sciences, Image Processing, IoT and Machine Learning in 5th INTERNATIONAL CONFERENCE ON INNOVATIVE COMPUTING AND COMMUNICATION (ICICC 2022) to be held on 19-20 Feb 2022, Organized by: Shaheed Sukhdev College of Business Studies, University of Delhi, New Delhi in Association with National Institute of Technology Patna & Korea Institute of Digital Convergence, South Korea University of Valladolid, Spain.
- Special Session as Session Chair on Contemporary Innovations in Engineering & Management in Data Sciences, IOT & Computational Techniques in International Conference on Contemporary Innovations in Engineering & Management held on 22nd – 23rd April 2022 at RGM College of Engineering and Technology, AP, India.

- **Special Session as Session Chair in 1st Indo-Serbian International Conference on Computational Intelligence for Engineering and Management Applications (CIEMA – 2022).**
- **Session Chair in DST-SERB sponsored International Conference on Artificial Intelligence of Things (AIoT4S-2024) held at NIST (Autonomous), Berhampur**
- **Session Chair in International Conference on Computing and Communication Networks (ICCCNet 2023) organized by Manchester Metropolitan University, UK on 17-18 November 2023.**

PATENTS

- **SYSTEM AND METHOD FOR ATTACK PREVENTION OF HEALTHCARE DATA IN CLOUD USING IOT, Patent Application No. 202011003633, Status: Published and Under Examination**
- **AUTOMATIC EMERGENCY VEHICLE EVACUATION SYSTEM, Patent Application No. – 202011013089, Status: Published**
- **DESIGN OF MACHINE LEARNING CLASSIFICATION ALGORITHMS USING IMAGE PROCESSING FOR DETECTION OF VEGETABLE CROPS DISEASE, Patent Application No. 202241012480, Status: Published**
- **PIEZORESISTIVE SENSORS BASED ECG BELT, Application No. 202311069337, Status; Published with Chitkara University (Punjab) et al.**
- **Multi utility Screwdriver Design No. 360864-001 dated 17/03/2022 registered with Chitkara University (Punjab) et al.**
- **Door Stopper Design No. 365407-001 dated 03/06/2022 registered with Chitkara University (Punjab) et al.**

CERTIFICATIONS

- **Certification Course on AWS Foundations: Machine Learning Basics run online on Training and Certification Division of Amazon's AWS dated 28th April 2020. Course Duration – 30min.**
- **I2OR certified E-Content Developer, Score – 30/30, Course Duration- 15hrs., Credit – 1, dated 8th May 2020.**
- **Certification Course on Fundamentals of Digital Marketing by Google Inc. dated 10th May 2020.**
- **Certificate Course on Machine Learning with Python ML0101ENV3 provided by cognitiveclass.ai Powered by IBM Developer Skills Network dated 21st May 2020.**
- **Certificate Course on Python 101 for Data Science provided by cognitiveclass.ai Powered by IBM Developer Skills Network dated 29th May 2020**
- **Certification for exceptional contribution as Judge for Software Edition of Smart India Hackathon 2020 held on 1st – 3rd August 2020.**
- **Certificate Course on Computer Vision Basics authorized by University of Buffalo and The State University of New York, offered by Coursera completed on 13th June 2020.**
- **Certificate Course on Programming for Everybody (Getting Started with Python) - an online non-credit course authorized by University of Michigan and offered through Coursera completed on 15th June 2020.**
- **Certification Course on Introduction to Programming with MATLAB by Vanderbilt University under Education for Everyone - Coursera Initiative during Lockdown dated 18th June 2020.**
- **Saylor Academy Certification Course on Operating System (CS-401) dated 18th Dec. 2021.**
- **Saylor Academy Certification Course on Elementary Data Structures (CS-201) dated 25th Dec. 2021.**
- **LinkedIn Learning Certification on Introduction to Linux – Completed on 15-01-2022**
- **LinkedIn Learning Certification on Learning C++ – Completed on 17-01-2022**

- LinkedIn Learning Certification on Artificial Intelligence Foundations: Machine Learning by Doug Rose -- Completed on 4th March 2022.
- Coursera Administrator Training offered by Coursera completed dated 13th September 2023.
- Certificate Course on “Introduction to Machine Learning” authorized by Duke University offered by Coursera completed dated 24 September 2023.
- Certificate Course on “Foundations of Data Science” authorized by GOOGLE and offered by Coursera completed dated 26 September 2023.
- Certificate Course on “What is Metaverse?” authorized by Meta, offered by Coursera completed dated 1st December 2023.
- Scopus Academy Module on Author Identity offered by Scopus Academy Completed in September 2023.
- Scopus Academy Module on Features of Scopus offered by Scopus Academy Completed in September 2023.

ATAL FDPs

- Attended a 5 Days Online Elementary FDP on Emotional Resilience from 25/09/2021 to 29/09/2021 organized by Mahatma Jyotiba Phule Rohilkhand University under AICTE Training and Learning (ATAL) Academy.
- Attended a 5 Days Online FDP on Human Centre Computing from 15/02/2021 to 19/02/2021 organized by Gauhati University Institute of Science and Technology under AICTE Training and Learning (ATAL) Academy.
- Attended a 5 Days Online FDP on Foundation of Data Science & its Applications from 26/07/2021 to 30/07/2021 organized by Indira Gandhi Delhi Technical University for Women under AICTE Training and Learning (ATAL) Academy.
- Attended a 5 Days Online FDP on Artificial Intelligence, Machine Learning and Deep Learning from 01/02/2021 to 05/02/2021 organized by University Visvesvaraya College of Engineering under AICTE Training and Learning (ATAL) Academy.
- Attended a 5 Days Online FDP on Smart Cities from 17/01/2022 to 21/01/2022 organized by JSS Academy of Technical Education under AICTE Training and Learning (ATAL) Academy.

ADMINISTRATIVE EXPOSURE / CONTRIBUTION TO INSTITUTION BUILDING:

- Worked as Academic Coordinator June 2021 – Jan 2023 (handled a team of 20+ Faculty and 1000+ students. KRAs - Managing People, Handling Administrative and Academic duties, and Complying with Educational Ecosystem of University.
- Handled Criteria 1 and Criteria 5 of NBA Accreditation Team at CSED, UIE, Chandigarh University.
- Handled Criteria 2 of ABET Accreditation Team at CSED, UIE, Chandigarh University.
- Handled NIRF Criteria for ranking Application of CGC College of Engineering, Mohali, Punjab, India
- Member Departmental Academic Committee, Pre-Board of Studies, and Board of Studies at CU

APPRECIATIONS/AWARDS:

- Certificate of Excellence by Researcher Academy for successful completion of Research Collaborations Course (Elsevier) dated April 22nd 2020.
- Certificate of Excellence by Researcher Academy for successful completion of Certified Peer Reviewer Course (Elsevier) dated June 5th 2020.

- Appreciated as Best Teacher at Teacher's Day 2020 at CGC College of Engineering, Landran for filing Patents.
- Appreciation for Exemplary Contribution towards successful implementation of Outcome Based Education for NBA Accreditation of Department of Computer Science & Engineering at Chandigarh University for 3 Years (Academic Session : 2021-2022).

MEMBER OF PROFESSIONAL BODIES:

- Senior Member IEEE (Membership No. 93327268) : Year 2023 onwards
- Indian Society for Technical Education (ISTE), India. (Membership No. : LM- 56978)
- International Association of Engineers (IAENG), Hong Kong. (Membership No. : 128239)
- International Association of Computer Science & Information Technology (IACSIT), Singapore (Membership No. : 80346272)
- Universal Association of Computer and Electronics Engineers (UACEE) (the IRED-Institute of Research Engineers and Doctors) (Membership No. : AM1010001826)
- Life Time Member Teaching and Education Research Association (TERA), Membership No. : TERA-M110318.
- Member, Computer Science Teachers Association (CSTA), USA, Membership No. 54328215
- Member, Global Professors Welfare Association Forum, India
- Professional Member, Institute for Exploring Advances in Engineering (IEAE) Membership No. IEAE2017CE10

BASIC ESSENTIAL DETAILS:

Father's Name	:	Late Sh. Jagdish Kumar
DOB	:	15.05.1983
Age	:	41 years
Religion	:	Hindu
Nationality	:	Indian
Category	:	General
Marital Status	:	Married
Spouse Name	:	Dr. Meenakshi
Aadhar (UID)	:	975655661041
PAN	:	ATTPK1431B
SALARY EXPECTED	:	17 LPA
SALARY CURRENTLY BEING DRAWN	:	12 LPA
Notice Period	:	01 month

Have you ever been punished during your service or convicted by a court of law? NO

Disclaimer: I ensure that all the details given above are true to the best of my knowledge.

Date: 24-April-2024

SUNIL KUMAR CHAWLA

Place: Mohali, Punjab, India

Brief Profile



Dr. Sunil Kumar Chawla is working as an Assistant Professor in Department of Computer Science and Engineering, Chitkara University, Rajpura, Punjab, India. He has received his doctorate from IKG Punjab Technical University, Kapurthala, Punjab, India. His research interests lie in Digital Image Processing, Biometrics, Image Segmentation, and Machine Learning and Pattern Recognition. He is a member of IEEE and other professional societies like ISTE, CSTA, IAENG, TERA and Institute of Scholars. He has more than 40 Publications in International journals of repute indexed in Scopus, WoS, Google Scholar and other eminent databases. He is associated with various international journals in the capacity of reviewer and guest editor. He has served as Technical Programme Committee Member, Reviewer, Session Chair and Program Chair of many conferences. He has edited two books under the publication of Routledge and CRC Press, Taylor & Francis Group, UK. He has also authored an international book entitled Segmentation and Normalization of Iris Recognition for Human Identification, Lampert Academic Publications, Germany. He has filed five patents. He is also dealing with various academic and administrative duties for inclusive growth of the institution being served by handling teaching, learning, research, education and overall development activities. He is also indulged in NBA, ABET, NIRF and other accreditation and other ranking frameworks.