Dr. ALOK AGGARWAL

Q-506, Jalvayu Towers, Jhajra
Dehradun, (UK) 248001 INDIA
Home: +91-9012645058

+91-7906230838
alokaggarwal59@gmail.com
www.linkedin.com/in/alok-aggarwal-81a100a/
Vidwan Id: https://vidwan.inflibnet.ac.in/profile/96818
Scopus Author Id: 56957677500
Orcid Id: 0000-0002-4394-4488

Engineering Teacher, Researcher and Administrator, targeting challenging assignments in the Education Sector at Senior/Medium level as Professor (CSE & IT) with reputed Universities / Institutes preferably with a blend of administrative role

SUMMARY

Earned PhD degree in Mobile Computing area from IIT Roorkee, INDIA in 2010, Master's degree in Computer Science & Engineering in 2001 and Bachelor's degree in Computer Science in 1995. Contributing over 25^+ years in Teaching (CSE & IT), as well as S/W Development. Currently spearheading efforts as a Professor (CSE), with University of Petroleum & Energy Studies, Dehradun (UK) INDIA. Earlier worked as Professor & Director with JP Group of Institutions, Professor & Associate Dean with Chandigarh University, Mohali, Punjab and contributed to organizational growth as administrator along with as academician. Current research interests include Machine learning, AI, power control management, MANET & wireless sensor networks.

CURRENT ASSIGNMENT

Professor (School of Computer Science), University of Petroleum & Energy Studies, Dehradun (UK) INDIA, w.e.f. **18th April 2018**
Key Responsibilities: Professor-in-Charge PG courses, Professor-in-Charge NAAC, Teaching related subjects of School of Computer Science, Curriculum Design & Improvisation, Supervise Research efforts (Member-RDC), Technical Evaluation of Prospective faculty for the School, Budget and academic management of the School with 4500+ students & 150+ faculty. Working for NIRF, NBA and NAAC related docs at School and University level.

Details of 23^+ Years of Cumulative Experience (Teaching, Administration, Research and Industry)   **ANNEXURE A**

TEACHING & RESEARCH INTERESTS

Teaching Computer Science & IT subjects (WSN& IoT standards, Mobile Application Development, Fuzzy logic Design, Computer Architecture, Operating Systems, Data Communication, Computer Networks, Software Engineering, Programming Languages [C, C++, Matlab etc], SAD, DBMS etc).

Research interests include power control management, MANET & wireless sensor networks.

RESEARCH: PUBLICATIONS, SUPERVISION AND PROJECTS

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EDUCATIONAL CREDENTIALS

- ❖ **PhD** in Mobile Computing field from I.I.T. Roorkee, Roorkee, INDIA in 2010 on the topic "Soft Handoff and Capacity of CDMA Communication Networks"
- ❖ **M.Tech (Computer Science & Engineering)** in Ist Division *(74% marks)* in Dec. 2001 from Kurukshetra University, Kurukshetra
- ❖ **M.Sc. Physics** (Sp. in Instrumentation Design & Maintenance) in Ist Division FIRST *(75% marks)* in June 2000 from Gurukul Kangri University, Haridwar, INDIA
- ❖ **B.Sc. (Computer Science)** in Ist Division *(72% marks)* in June 1995 from Gurukul Kangri University, Haridwar, INDIA

PERSONAL DOSSIER

Date of Birth:	1st July 1976 (46 years)
Marital Status:	Married (Wife, Dr. Shalini Aggarwal employed as Asstt. Professor, School of Computing, Graphic Era Hill University Dehradun, UK, India INDIA and blessed with two children, aged 14 and 12 years)
Interests:	Keen interest in Reading (Preferably Technical), Badminton, Cricket, Travel, Music
Languages:	Hindi (Native), English, Punjabi (Elementary)
References:	Available on call

(Alok Aggarwal)

ANNEXURE A- CUMULATIVE EXPERIENCE (Teaching, Administration, Research & Industry) - 23⁺ Years

◆ **Professor (CSE),** University of Petroleum & Energy Studies, Dehradun (UK) INDIA **w.e.f. April'18**
Key Responsibilities: Professor-in-Charge PG courses, Professor-in-Charge NAAC, Teaching related subjects of CSE Department, Curriculum Design & Improvisation (Member-BoS, Academic Council), Supervise Departmental Research efforts (Member-RDC), Technical Evaluation of Prospective faculty for the department, Academic management of the department with 4500+ students & 150+ faculty.

◆ **Professor (CSE) &Associate Dean,** Chandigarh University, Mohali, (PUNJAB) **July'18 – April'18**
Key Responsibilities: Teaching related subjects of the CSE Department, Curriculum Design & Improvisation (Chairman-BoS), Supervise Departmental Research efforts (Chairman-DRC), Technical Evaluation of Prospective faculty for the department, Budget and academic management of the department with 7500+ students & 250+ faculty.

◆ **Professor (CSE) & Director**, JP Institute of Engineering & Technology, Meerut (UP) **July'12 – July'17**
Key Responsibilities: Teaching (CSE) subjects and Supervising Thesis / Dissertation / Projects for UG/PG & PhD level students as well as representing the institutions as speaker in various National & International Seminars. Accountable for the academic and general management of the institute with 3500+ students and 150+ faculty. Other responsibilities include accreditations, approvals, and affiliations for various courses and curriculum design.

◆ **Asstt. Professor & Research Convener,** Department of CSE/IT, Jaypee Institute of Information Technology
 (Deemed University), Noida, (UP) **Jan'09 – July'12**
Key Responsibilities: Teaching CSE/IT subjects and Supervising Thesis / Dissertation / Projects for UG/ PG & PhD level students along with SPOC for research leading to PhD degree of the University, Member Academic Council & BoS, Chairman DPMC, Supervision & execution of University Research efforts, Technical Nodal Officer, National Knowledge Networks, Govt.of India.

◆ **Asst. Professor (CSE) & HoD (CSE),** DIT University & Icfai University, Dehradun, (UK) **Mar'02 – Jan. '09**
Key Responsibilities: Teaching CSE/IT subjects. Supervising Dissertation / Projects for UG & PG level students. Technical Evaluation of Prospective faculty for the department, Academic management of the department with 1000+ students & 50+ faculty members.

◆ **Software Engineer,** Raghav Infotech Limited, J.P. Nagar, Bangalore **Sep'95 – July'98**
Key Responsibilities: Contributed as a member of development team & involved in coding, analysis & design of software.

ANNEXURE B - AWARDS & RECOGNITION

- Awarded *Star Researcher Award* by University of Petroleum & Energy Studies, Dehradun, 2022

- Awarded *Star Researcher Award* by University of Petroleum & Energy Studies, Dehradun, 2021

- Awarded *Star Researcher Award* by University of Petroleum & Energy Studies, Dehradun, 2020

- Awarded as *Best Researcher* during Global Education and Corporate Leadership Summit, Jaipur - 2019 on 15th Dec. 2019

- Awarded five times by *The Institute of Engineers* on World Water Day, 22nd Mar. 2017, on Engineers Day, 15th Sep. 2016, on World Environment Day, 6th June 2016, on World Habitat Day, 5th Oct. 2015 & 7th Oct. 2013, over different themes

- Awarded by *India Today and Worldwide Achievers*, Delhi as Most Admired Director in UP during Asia Education Summit-2016

- Awarded five times by *Meerut Engineers Association* on Engineers Day, 15th Sep. 2012-2016 for significant contribution to MEA

- Rajiv Gandhi Education Excellence Award - 2015 for outstanding achievement in the field of Education

- Listed in Marquis Whos' Who - three times

- Award for Research Excellence-2013 by *The Indus Foundation, USA* during Indo-Global Education Summit, Mumbai, Nov. 2013

- *Best Research Paper Awards:* CPIE-2023; NIT Jalandhar, IEEE IMPACT-2022; AMU, Doctoral Colloquium UPES-2019, IEEE UPCON-2018, Int. Conf. on Advancement in Communication Technologies; South Korea; 2012, NCEICA-2012; Tiruchengoda; Tamilnadu; India, ICRTITC-2010 at Bangalore, International Conf. on System Science; Sep. 2004; Poland (Europe), National System Conference (NSC); 2008; IIT Roorkee; Roorkee; India

- Awarded many times by Rotary International (Distt. 3080) for various social service activities

- Outstanding Program Officer award – 2006 & 2007 by Uttaranchal state NSS unit

- Uttaranchal Governor's appraisal for organizing many blood donation camps in Uttaranchal

- University Gold Medal for securing highest marks at PG level

- University Scholarship holder at UG level

ANNEXURE C – ADMISTRATIVE ACTIVITIES

➡ Professor-in-Charge PG courses, Professor-in-Charge NAAC
➡ Associate Dean (CSE), Chandigarh University from July 14, 2017 to April 17, 2018
➡ Director, JP Institute of Engineering & Technology, Meerut from July 2012 to July 2017
➡ PhD Program Convener, JIIT University, Noida from Jan. 2009 - July 2012
➡ Technical Nodal Officer, National Knowledge Networks, Govt.of India at JIIT University, Noida from Aug. 2009 - July 2012
➡ Head of Deptt., Computer Science & Engineering, DIT University, Icfai University, Dehradun from 2003 – 2008
➡ Program Officer – National Service Scheme (NSS), Icfai University, Dehradun from 2006 – 2008
➡ Convener: Student Activities, Time Table and Library etc. at Icfai University, Dehradun and DIT Dehradun

ANNEXURE D – RESEARCH SUPERVISION

Research or Academic Projects / Dissertations / Thesis Supervised:

❖ **PhD Supervision:** Six scholars have been awarded Phd Degrees while another 6 pursuing
❖ **PG Courses:** M.Tech (CSE) – 20, MCA – 30
❖ **UG Courses:** 100+ projects supervised for B.Tech (CSE/IT) over a span of 21 years.

ANNEXURE E – COURSES THOUGHT & DEVELOPED AT UG & PG LEVEL

Theory Course Developed at M.Tech level

Adv. Mobile Computing
Adv. Computer Networks
Adv. Wireless and Mobile Communication
Adv. Software Engineering
Fuzzy logic Design

Theory Course Developed at B.Tech level

IoT for Industries
Designer of Smarter Cities
Mobile Application Development
WSN & IoT standards
Impact of IoT & Smarter Cities on Societies, etc.

Labs Developed at M.Tech level

Adv. Mobile Computing Lab
Adv. Wireless & Communication Lab
Adv. Software Engineering Lab
Adv. Computer Architecture Lab

Labs Developed at B.Tech level

Mobile Computing Lab
Wireless and Mobile Communication Lab
Mobile Application Development Lab
WSN & IoT standards Lab
IoT for Industries Lab, etc.

Subjects Taught

Subjects taught at B. Tech. and M. Tech. level:

Adv. Mobile Computing
Designer of Smarter Cities
Artificial Intelligence
Smart Cities
Software Project Management
Adv. Computer Networks
Adv. Wireless and Mobile Communication
Adv. Software Engineering
Adv. Computer Architecture

IoT for Industries
Impact of IoT & Smarter Cities on Societies
Data Communication
Computer Architecture
Mobile Application Development
Wireless Sensor Networks & IoT standards
Web Technologies (Java, Java Script, XML)
Object Oriented Programming through C++
Database Management Systems, etc.

ANNEXURE F – PROJECT FUNDINGS

Project Funding

i. Research Project entitled *Design, implementation and verification of ML-based model for identification of insulin resistance in humans using non-invasive techniques* approved by UPES, Dehradun, costing 2,25,000/ as Principal Investigator during March 2021.

ii. Research Project entitled *Impact of Tornado vortex induced aerodynamic loads on structural projections in low rise buildings using sensor based IoT devices* approved by UPES, Dehradun, costing 2,50,000/ as Principal Investigator during September 2018.

iii. Research Project entitled *Developing an open source Lightweight Cyber Threat Sharing Platform* was approved by UPES, Dehradun, costing 3,00,000/ as Co-Principal Investigator during September 2018.

iv. Completed MODROB project funded from All India Council of Technical Education, New Delhi of Rs. 5,00,000/ during 2013-2016 at JP Institute of Engineering & Technology, Meerut.

ANNEXURE G – SESSION CHAIR RELATED ACTIVITIES

Session Chair related Activities

Aug. 2022	2022 IEEE I/C on Intelligent Computing Instrumentation and Control Technologies (ICICICT), Kannur, Kerala, India
Dec. 2021	2021 IEEE I/C on Disruptive Technologies for Multi-Disciplinary Research and Applications (CENTCON), Bangalore, India
Nov. 2021	2021 IEEE I/C on Computation System and Information Technology for Sustainable Solutions (CSITSS), Bangalore, India
Dec. 2020	1st Virtual Int. Conf. on Recent Trends of Teaching and Research in App. Sci. & Engineering 22-23 December 2020
July 2020	International Conference on Advancement in Interdisciplinary Research, July 24-26, 2020, Jaipur
Aug. 2019	Int. Conf. on Cont. Development of Information Technology & Management, 9-10 Aug. 2019, Dehradun
Nov. 2018	5th IEEE UP Section Int. Conf. on Electrical, Electronics and Computer Engg. (UPCON), 2-4 Nov. 2018, second day
Nov. 2018	5th IEEE UP Section Int. Conf. on Electrical, Electronics and Computer Engineering (UPCON), 2-4 Nov. 2018, third day
Oct. 2018	Inter. Conference on Startup Ventures: Technology Developments and Future Strategies, Jaipur, 8-9 October 2018
Sep. 2018	National Semi. on Smart Inno.Tech.to Counter measure Chall. in Cyber Sec., by AKTU, Lucknow 28-29 Sep. 2018.
April 2016	Int. Conference on Computing, Communication & Automation (ICCCA), Galgotia University, Noida, 29th -30th April 2016
May 2015	Int. Conference on Computing, Communication & Automation (ICCCA), Galgotia University, Noida, 15th -16th May 2015
Dec. 2014	Third IEEE International Conference on *Parallel, Distributed and Grid Computing* (PDGC-2014), Solan, India
Dec.2014	IEEE Symposium on Signal Processing and Information Technology (ISSPIT 2014), JIIT, Noida, India
Nov. 2013	Second Inter. Conf. on System Modeling & Adv. in Research Trends (SMART-013),TMU, Moradabad, India
April 2013	World Conference on Advances in Communication and Control Systems CACCS-2013, Dehradun, April 6-8, 2013
Dec.2012	IEEE Inter. Conf. on *Parallel, Distributed and Grid Computing* (PDGC-2012), December 6-8, 2012, Waknaghat, Solan.
Oct. 2012	International Conference on System Modeling & Advancement in Research Trends (SMART-2012),TMU, Moradabad.
Mar. 2012	Workshop on Android Application by Accenture, Bangalore, March 13, 2012
Feb. 2012	14th Int. Conf. on Advanced Communication Technology (ICACT 2012), Feb. 19-22, 2012, Korea (South)
Aug. 2011	Int. Conf. on Cont. Computing IC3-2011 organized by JIIT Noida and University of Florida, USA, Noida, Aug. 8-10, 2011
April 2011	Workshop on Cloud Computing by Accenture on April 23, 2011 at JIIT University, Noida
Mar. 2011	Workshop on Mobile Peer to Peer Computing on March 8, 2011 at JIIT University, Noida
Nov. 2010	Workshop on Research Methodology for Computer Science by Prof. Rao Vemuri, University of California, Nov. 12, 2010
Oct. 2010	Workshop on Conducting Design Science Research in IT on Oct. 19, 2010 at JIIT Noida, on Oct. 19, 2010
Sep. 2010	Workshop on Adv. in Wireless Sensor Networks by Prof. Rao Vemuri, University of California, Davis from Sep. 2-3, 2010
Aug. 2010	Int. Conf. on Cont.Computing IC3-2010 organized by JIIT Noida and University of Florida, USA, at Noida, Aug. 6-8, 2010
Dec. 2008	32nd National System Conference NSC-2008, IIT Roorkee, Roorkee, UA, Dec. 17-19, 2008
Oct. 2008	Workshop on ICT and it's Impact on Edu. under TEQIP, World Bank Project, Govt. of India during Oct. 23-25, 2008

Invited Speaker/Talks/Lectures

Mar. 2022	Delivered a keynote talk on "A Non-invasive Approach to Identify Insulin Resistance with Triglycerides and HDL-c Ratio Using Machine Learning" at International Congress on Adv. Cardiology and Cardiovascular Research (Adv. Cardiology 2022)" during at Paris, France
Dec. 2020	Delivered a keynote talk on *Congestion Control by reducing wait time at a traffic junction by using fuzzy logic controller and IoT* during 1st Virtual Int. Conf. on Recent Trends of Teaching and Research in App. Sci. & Engineering, 22-23 Dec. 2020
July 2020	Delivered a keynote talk on *Insulin Resistance prediction using Machine Learning Approaches* during International Conference on Advancement in Interdisciplinary Research, July 24-26, 2020, Jaipur
July 2020	Delivered a keynote talk on *Traffic congestion control using IoT devices at a signalized traffic junction* during International Conference on Advancement in Interdisciplinary Research, July 24-26, 2020, Jaipur
June 2020	Delivered an invited talk on *Industrial Uses of IoT* during Faculty Development Program "Mathematics: Mathematical Sciences & its applications to latest technologies," organized by Icfai University Jaipur, 9th June 2020.
Nov. 2018	Delivered a keynote talk on *Operating Systems for WSN* during 5th IEEE UP Section Int. Conf. UPCON, 2-4 Nov. 2018.
Nov. 2018	Delivered an invited half Day workshop on *Cyber Security, Issues & Practices* at Icfai University, Dehradun on 22nd Nov. 2018
Oct. 2018	Delivered an invited half Day workshop on *Cyber Security, Using Password Mgt.* at UPES, Dehradun on 3rd Oct. 2018
Sep. 2018	Delivered a keynote talk on *Cyber Security using Password Management* in National Seminar on Smart Innovative Technologies, organized by Dr. APJ Abdul Kalam Technical University, Lucknow during 28-29 Sep. 2018.
Sep. 2018	Delivered an invited session on *IoT, Challenges and opportunities*, MIT Group of Institution, Moradabad on 29th Sep. 2018
Aug. 2018	Delivered an invited session on *IoT, Future of Tomorrow,* at Chandigarh University on 11th August 2018
July 2018	Delivered an invited session on *Operating Systems for Internet of Things,* at Chandigarh University on 14th July 2018
Mar. 2017	Delivered a talk on "Use of IT for solving water problems" during one-day Seminar on *World Water Day* dated March 22, 2017 organized by The Institute of Engineers, Meerut chapter, Meerut
Sep. 2016	Delivered a talk on "Skill Develop. for Young Engineers" during one-day Seminar on *Engineers' Day* dated September 15, 2015 organized by The Institute of Engineers, Meerut chapter, Meerut
June 2016	Delivered a talk on "Wildlife and our responsibilities" during one-day Seminar on *World Environment Day* dated June 6, 2015 organized by The Institute of Engineers, Meerut chapter, Meerut
Mar. 2016	Delivered a talk on "Engineering Materials & Advances in Brick Technology" during one-day Seminar on *Elastic and Plastic Behavior of Engineering Materials and It's Applications* at JPIET, Meerut, dated 12th March 2016
Feb. 2016	Delivered two talks on "Funda. & Recent Trends in Mobile Wireless Comm. Systems" and "Recent Trends in Soft Handoff & PC," during one-day Seminar on *Adv.&App. of Mobile Wireless Comm. Sys.* at JPIET, Meerut, dated 20th Feb. 2016
Feb. 2016	Delivered two talks on "Design, app. & trends in Processing Unit" and "Design, applications & trends in Multi-core Processors," during one-day Seminar on *Advances & Applications of Mobile Wire.Comm. Sys.*, at JPIET, Meerut, dated 6th February 2016
Oct. 2015	Delivered a talk on "Solving public spaces for all" Seminar on *World Habitat Day,* Oct. 5, 2015 org. by The IoE, Meerut
Mar. 2014	Delivered a talk on "Solving water problems through Information & Communication Technology" during one-day Seminar on *World Water Day* dated March 22, 2014 organized by Meerut Engg. Association & Indian Water Res.Society, JPIET, Meerut
Oct. 2013	Delivered a talk on "Solving transportation Problem using tiny steps" during one-day Seminar on *World Habitat Day* dated October 7, 2013 organized by The Institute of Engineers, Meerut chapter, Meerut
July 2013	Taught a Full course on Cryptography & Network Security (CS-285) to the M.Tech (CSE), UTU, Dehradun, INDIA
June 2012	Taught a Full course on Advanced Computer Architecture (CS-185) to the M.Tech. (CSE), UTU, Dehradun, INDIA
June 2012	Taught a Full course on Object Oriented Analysis and Design (CS-281) to the M.Tech. (CSE) Students of UTU at DIT, Dehradun, INDIA
June 2011	Taught a Full course on OOAD (CS-281) to the M.Tech. (CSE) Sequential Students of UTU at KEC, Dwarhat, Almora
June 2011	Taught a Full course on Software Engineering (CS-183) to the M.Tech. (CSE) Sequential Students of UTU at KEC, Dwarhat, Almora
July 2011	Taught a Full course on Adv. Com. Arch. (CS-185) to the M.Tech. (CSE) Students of UTU at College of Engineering, Roorkee, INDIA
July 2011	Taught a Full course on Adv. Com. Arch. (CS-185) to the M.Tech. (CSE) Students of UTU at DIT, Dehradun, INDIA
June 2010	Taught a Full course on OOAD (CS-281) to the M.Tech. (CSE) Sequential Students of UTU at KEC, Dwarhat, Almora
June 2010	Taught a Full course on Adv. Com. Arch. (CS-185) to the M.Tech. (CSE) Sequential Students of UTU at KEC, Dwarhat, Almora
June 2005	Taught a Full course on Computer Based Num. Tech. to the Extended B.Tech. students of ONGC employees at Dehradun
May 2005	Taught a Full course on Operating Systems to the Extended B.Tech. students of ONGC employees at ehradun
June 2004	Taught a Full course on Object Oriented Prog. using C++ to the Extended B.Tech. students of ONGC employees at Dehradun
May 2004	Taught a Full course on Artificial Intelligence to the Extended B.Tech. students of ONGC employees at Dehradun
July 2003	Taught a Full course on Software Engineering to the M.C.A. students of IGNOU at center: IGNOU, Dehradun
May 2003	Taught a Full course on Artificial Intelligence to the M.Sc. (IT) students of IGNOU at center: IGNOU, Dehradun
June 2003	Taught a Full course on Computer Architecture to the B.Tech. (CSE) students of Gurukul Kangri University, Haridwar
May 2002	Taught a Full course on Artificial Intelligence to the M.Sc. (IT) students of IGNOU at center: IGNOU, Dehradun

ANNEXURE I - DETAILS OF PUBLICATION
(Also available at Researcher ID, SCOPUS, Google Scholar, Research gate, LinkedIn etc.)

Total Number of Refereed Research Papers: 255

1. Refereed International Journal Publications: 82
2. Refereed Books Publications: 05
3. Refereed Book Chapter Publications: 03
4. Refereed National Journal Publications: 07
5. Refereed International Conference Publications: 125

6. Refereed National Conference Publications: 17
7. Refereed International Symposium Papers: 06
8. Refereed International Short Research Paper: 01
9. Refereed International Workshop Publications: 04
10. Refereed International Position paper: 06

Major Publications during the last few years

Books

1. Narendra Kr , Santosh K Sharma , Alok Agrawal & Mayank Kumar Jain, Fundamentals of Automata Theory and Compiler Construction, 1/e, ISBN No. 9789386768728, IK International Publishing House, New Delhi, 2021.

2. Alok Aggarwal, et. al., "Software Engineering," Navbharat Prakashan, Meerut, 2011.

3. Alok Aggarwal, et. al., "Artificial Intelligence," Vayu Education of India, New Delhi, 2010.

4. Alok Aggarwal, "Computer Based Numerical & Statistical Techniques using C++," Sikkim Manipal University, Manipal, 2007.

5. Alok Aggarwal, "Artificial Intelligence," Sikkim Manipal University, Manipal, 2008.

Book Chapters

6. Kumar Adarsh, Aggarwal Alok, Sharma Kriti, Goyal Mukta, "Active learning in E-learning: a case study to teach elliptic curve cryptosystem, its fast computational algorithms and authentication protocols for resource constraint RFID-sensor integrated mobile devices," Book Chapter, E-learning Methodologies: Fundamentals, technologies and applications, ISBN: 9781839531200, e-ISBN: 9781839531217, Feb. 2021.
(IET Digital Library: Active learning in E-learning: a case study to teach elliptic curve cryptosystem, its fast computational algorithms and authentication protocols for resource constraint RFID-sensor integrated mobile devices (theiet.org))

7. Kumar Adarsh, Gopal Krishan, and Aggarwal Alok, "A Survey of Lightweight Identification, Authentication and Distance Bounding Protocols for Resource Contrained Devices", Book Chapter, Infor. Security and Its Issues & Challenges, editor Dr. Chandan Koner, SciencePG, New York, USA, 2016.

8. Kumar Adarsh, Gopal Krishan, and Aggarwal Alok, "Elliptic Curve Cryptosystem, its Fast Computational Algorithms and Authentication Protocols," Book Chapter, Emerging Security Solutions Using Public and Private Key Cryptography, editor Dr. Addepalli V.N.Krishna, IGI Global, USA, 2015.

9. Kumar Adarsh, Gopal Krishan, and Aggarwal Alok, "RFID Authentication Protocols for Internet of Things (IoT): An Analytical Survey", Book Chapter, Emerging Security Solutions Using Public and Private Key Cryptography, editor: Dr. Addepalli V.N.Krishna, IGI Global, USA, 2015.

Patents

10. "System and Method for Controlling Congestion at a Traffic Junction" by Alok Aggarwal, Manpreet Singh, Kshitij Garg, Patent Application no. 202011016044, The Patent Office Journal No. 25/2020, Date of Publication: 26th June 2020.

11. "System and Method for Text Recognition from Natural Scene Images" by Alok Aggarwal, Deepak Chandra Bijalwan, Adarsh Kumar, Patent Application no. 202011024215, The Patent Office Journal No. 25/2020, Date of Publication: 26th June 2020.

12. "Noise Reduction System and Method" by Alok Aggarwal, Deepak Chandra Bijalwan, Vinay Singh, Patent Application no. 202011022847, The Patent Office Journal No. 25/2020, Date of Publication: 26th June 2020.

13. "Version Control System and Method for Migration of Data from SVN to Git Server" by Alok Aggarwal, Vinay Singh, Shashi Bisht, Deepak Chandra Bijalwan, Shalini Aggarwal, Patent Application no. 202011022402, The Patent Office Journal No. 25/2020, Date of Publication: 26th June 2020.

14. "System and Method for non-invasive Prediction of Insulin resistance" by Alok Aggarwal, Madam Chakradar, Patent Application No. 202011016050, The Patent Office Journal No. 25/2020, Date of Publication: 26th June 2020.

International Journals

15. Madam Chakradar, Alok Aggarwal, Shankar, "A Non-invasive Approach to Identify Insulin Resistance with Triglycerides and HDL-c Ratio using Machine learning," *Neural Processing Letters (NEPL)*, vol. 55, no. 1, pp. 93 – 113, Feb. 2023. (Impact Factor: 2.908, H-Index: 50) [Index: SCI] (10.1007/s11063-021-10461-6)

16. Ankit Vishnoi, Alok Aggarwal, Ajay Prasad, Manish Prateek, Shalini Aggarwal, "Text encryption for lower text size: Design and implementation," Materials Today: Proceedings, vol. 79, no. 2, pp. 278-281, 2023. DOI: https://doi.org/10.1016/j.matpr.2022.11.118 (https://www.sciencedirect.com/science/article/pii/S221478532206967X)

17. Atul Kumar Srivastava, Dhiraj Pandey, Alok Aggarwal and Sunil Gupta, "Web document summarisation using pointwise mutual information (PMI) from web resources," *International Journal of System of Systems Engineering,* vol. 12, no. 4, pp 329-353, 2022. https://doi.org/10.1504/IJSSE.2022.127991 [Index: Scopus] (https://www.inderscienceonline.com/doi/abs/10.1504/IJSSE.2022.127991?journalCode=ijsse)

18. Amarpreet Singh, Mohammad S. Obaidat, Sandeep Singh, Alok Aggarwal et al., "A simulation model to reduce the fuel consumption through efficient road traffic modelling," *Simulation Modelling Practice and Theory*, vol. 121, 2022, 102658, ISSN 1569-190X. (Impact Factor: 4.199) [Index: SCI] https://doi.org/10.1016/j.simpat.2022.102658. (https://www.sciencedirect.com/science/article/pii/S1569190X22001289)

19. Aggarwal Alok, Singh Vinay and Kumar Narendra, "A Rapid Transition from Subversion to Git: Time, Space, Branching, Merging, Offline Commits & Offline builds and Repository Aspects," *Recent Advances in Computer Science and Communications*, vol. 15, no. 5, 2022 e060422194190. [Index: Scopus] (https://dx.doi.org/10.2174/2666255814666210621121914)

20. Srivastava A.K., Pandey D. & Agarwal A., "Redundancy and coverage aware enriched dragonfly-FL single document summarization," *Language Resources and Evaluation,* vol. 56, pp. 1195–1227, 2022. (Impact Factor: 1.837) [Index: SCI] (https://doi.org/10.1007/s10579-022-09608-1)

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Technical Committee Activities (Member/Reviewer)

2022	2022 IEEE I/C on Intelligent Computing Instrumentation and Control Technologies (ICICICT), Kannur, Kerala, India
2021	2021 IEEE I/C on Disruptive Technologies for Multi-Disciplinary Research and Applications (CENTCON), Bangalore, India
2021	2021 IEEE I/C on Computation System and Information Technology for Sustainable Solutions (CSITSS), Bangalore, India
2020	1st Virtual Int. Conf. on Recent Trends of Teaching and Research in App. Sci. & Engineering 22-23 December 2020
2020	International Conference on Advancement in Interdisciplinary Research, July 24-26, 2020, Jaipur
2019	Int. Conf. on Cont. Development of Information Technology & Management, 9-10 Aug. 2019, Dehradun
2019	21st IEEE Inter. Conference on Advanced Communications Technology (ICACT) at Phoenix Park, PyeongChang Gangwon-do, Korea
2018	18th International Conference on Intelligent Systems Design and Applications, Springer, Vallore, 6-8 Dec. 2018
2018	4th Inter.Conf. on NGCT 2018, University of Petroleum and Energy Studies, Dehradun, November 21-22, 2018
2018	4th IEEE Int. Conf. on Electrical, Electronics & Computer Engineering (UPCON), Gorakhpur, 2-4 Nov. 2018
2018	7th IEEE Inter. Conf. on System Modelling & Advance. on Research Trends (SMART-2018) during 23-24 Nov. 2018
2018	Inter. Conference on Startup Ventures: Technology Developments and Future Strategies, Jaipur, 8-9 October 2018
2018	Nat. Seminar on Smart Inno. Tech. to Countermeasure Challenges in Cyber Security, organized by AKTU, Lucknow, 28-29 Sep. 2018
2018	20th IEEE Inter. Conference on Advanced Communications Technology (ICACT) at Phoenix Park, PyeongChang Gangwon-do, Korea
2015	Program Committee, ICCN 2015 conference held at ITM University Gwalior, 19 - 21 November 2015
2015	Program Committee, Int. Conf.on Computing, Comm. & Automation (ICCCA), Galgotia University, Noida, 15th -16th May 2015
2015	Program Committee, IEEE Int. Conf. on Computing, Communication, and Automation (ICCCA-2015), May 15-16, 2015
2015	Program Committee, Symposium on Enabling an Intelligent Planet via Informatics and Cybernetics: IPIC 2015, Caracas, Venezuela
2015	Program Committee, IEEE Inter. Conference on Next Generation Computing Technologies (NGCT-2015), September 4-5, 2-15.
2015	Program Committee, Collaborative Conf. for Student Achievement (CCSA-2015), March 30 - April 1, 2015, Greensboro, NC
2015	Program Committee, Proc.17th Int. Conf. on Advanced Communication Technology (ICACT 2015), July 1-3, 2015, Korea
2014	Program Committee, IEEE Symposium on Signal Processing and Information Technology (ISSPIT 2014), JIIT, Noida, India
2014	Program Committee, Information Security Journal: A Global Perspective, Taylor & Francis
2014	Program Committee, Int. Conf. on Medical Imaging, m-Health & Emerging Comm. Systems (MEDCOM-2014), Nov. 7-8. 2014, Noida
2014	Program Committee, The Third IEEE Inter. Conf. on *Parallel, Distributed and Grid Computing* (PDGC-2014), Waknaghat, Solan, India
2013	Program Committee, Inter. Conf. on System Modeling & Advance. in Research Trends (SMART-013), TM University, Moradabad
2013	Program Committee, World Conference on Advances in Comm. and Control Systems CACCS-2013, Dehradun April 6-8, 2013
2012	Program Committee, IEEE Inter. Conf. on *Parallel, Distributed and Grid Computing*, December 6-8, 2012, Waknaghat, Solan, India
2012	Program Committee, Inter. Conf. on System Modeling & Adv. in Research Trends (SMART-2012), TMU, Moradabad, India
2012	Program Committee, AICTE spon. W/s on Recent Dev. in Opt. Tech. for Solving Indus. Problems, Aug. 25-26, 2012, JPIET, Meerut
2012	Program Committee, AICTE spon. W/s on Rural Dev. & Mgt. through IT, Aug. 18-19, 2012, JPIET, Meerut
2012	Program Committee, MASAUM I/C on IT 2012 (MIC-IT'12), July 27-29 , 2012, Liverpool, UK, by MASAUM Network
2012	Program Committee, Int. Conf. on Contemp. Computing IC3-2012 organized by JIIT and University of Florida,USA, Aug. 6-8, 2012
2012	Program Committee, Proc.14th Int. Conf. on Advanced Communication Technology (ICACT 2012), Feb. 19-22, 2012, Korea
2011	Program Committee, I/C on Computing 2011 (IIOCC 2011), September 23-25, 2011, by MASAUM Network
2011	Program Committee, International Conference on Future Internet Computing (ICFIC - 2011), 23rd -25th December, 2011
2011	Program Committee, National Seminar on Vedic Studies and information Technology, Dev Sanskriti Vishwvidyalaya, Haridwar
2011	Program Committee, One-day International Online Conference on Information Technology 2011 (IOCIT '11) on August 21, 2011
2011	Program Committee, Workshop on Cloud Computing by Accenture on April 23, 2011 at JIIT University, Noida
2011	Program Committee, Canadian Journal on Multimedia and Wireless Networks, ISSN: 1923-1697
2011	Program Committee, W/s on Mobile Peer to Peer Comp., Missouri Univ. of Science and Tech., USA on March 8, 11 at JIIT, Noida
2011	Program Committee, Canadian Journal on Signal Processing, ISSN: 1923-1709
2011	Program Committee, Int. Conf. on Contem. Computing IC3-2011 org. by JIIT and University of Florida, USA, Noida, Aug. 8-10, 2011
2010	Program Committee, W/s on Con. Design Sc. Research in IT, Georgia State University on Oct. 19, 2010 at JIIT Noida**,** Oct. 19, 2010
2010	Program Committee, Int. Conf. on Contem. Computing IC3-2010 organized by JIIT and University of Florida,USA, Aug. 9-11, 2010
2009	Program Committee, Int. Conf. on Contem. Computing IC3-2009 organized by JIIT and University of Florida, USA, Aug. 17-19, 2009
2008	Program Committee, W/S on ICT and it's Impact on Edu. under TEQIP, World Bank Project, Govt. of India during Oct. 23-25, 2008
2008	Program Committee, Int. Conf. on Emerging Tech. and App. in Engg., Tech. and Sciences, Dehradun, Uttaranchal, Jan. 13-14, 2008
2008	Program Committee, National Workshop on Appropriate Tech. for Hills, Pantnagar Agri. University, Pantnagar, Oct. 16-18, 2008
2008	Program Committee, 32nd National System Conference NSC-2008, IIT Roorkee, Roorkee, Haridwar, UA, Dec. 17-19, 2008
2005	Program Committee, National Conf. by Directorate of Technical Education, Uttaranchal Govt, Dehradun, during May 30-31, 2005
2004	Program Committee, National Conference on Emerging Trends and Applications ETA-2004, Rajkot (Gujrat), March 25-26, 2004
2003	Program Committee, Second National Seminar AIM-2003 (Advancement in IT & Management), ONGC Dehradun

Other External Appointments

July 2012 - Present	Member, University Research Committee, Mewar University, Chittorgarh, India
July 2015 - Present	Member, University Research Committee, Ansal University, Gurgaon, India
July 2013 - Present	Member, University Research Committee, Dev Sanskriti University, Haridwar, Uttarakhand
Jan. 2012 - Present	Member, University Research Committee, Teerthanker Mahaveer University, Moradabad, India
July 2011 - Present	M.Tech. (Computer Sc. & Engg.) Examiner, Uttarankhand Technical University, Dehradun
May 2011 - Present	Visiting Faculty of Computer Sc. & Engg., Uttarankhand Technical University, Dehradun
May 2009 - Present	Visiting Faculty of Computer Sc.& Engg., VCT Kumaun Engineering College, Dwarahat, Almora, Uttarakhand
May 2011 - Present	Visiting Faculty of Computer Sc. & Engg., College of Engineering, Roorkee, Haridwar, Uttarakhand
July 2009 - Present	UG and PG examiner and evaluator, Jamia Hamdard University, Hamdard Nagar, New Delhi
July 2010 - Present	M.Tech. (CSE) and thesis evaluator, Banasthali Vidyapeth University, Rajasthan
July 2009 - Present	UG and PG examiner and evaluator, Dev Sanskriti University, Haridwar, Uttarakhand
July 2003 - 2009	UG and PG examiner & evaluator, Indira Gandhi Nat. Open University (IGNOU), Regional Center, Dehradun
Nov. 2005 - 2008	UG and PG examiner and evaluator, Uttar Pradesh Technical University, Lucknow
July 2004 - 2009	Visiting Faculty of Computer Sc. and Engg., Kumaun Engineering College, Dwarahat, Almora, Uttarakhand
July 2004 - 2006	UG examiner and evaluator, Faculty of Technology, Gurukul Kangri University, Haridwar UA
July 2003 - 2008	UG and PG examiner and evaluator, Graphic Era Institute of Engg. and Technology, Dehradun
July 2002 - 2004	UG and PG examiner and evaluator, CCS Meerut University, Meerut, UP
July 2003 - 2005	Visiting Faculty, examiner and evaluator, PTU's exten. BTech program for ONGC employees at ONGC, DDun

Software Exposer

Languages: Python, C, C++, JAVA, Adv. JAVA, JSP, HTML, DHTML, JAVA Script, PROLOG, FORTRAN, COBOL, BASIC

Operating System: MS-DOS, WINDOWS etc.

Packages: MS Office, Word Star, LOTUS-123 etc.

Social Activities

Secretary & Director, Meerut Engineers Association (MEA), Meerut
Member, Lions Club, International, Meerut
Ex- President for three years of Rotary Club (Rotary International Distt. 3080)
Life member of International Goodwill Society of India (IGSI)
Member Haridwar Nagrik Parishad, Haridwar etc.