

## RAJENDRA HEGADI

**Dr. Rajendra Hegadi** is Associate Professor in Department of Computer Science and Engineering, Indian Institute of Information Technology, Dharwad. He served as Principal in two Engineering Colleges affiliated to Swamy Vivekanand Technical University, Bhilai. He has worked as System Analyst and has undertaken many project consultancy. His area of interest are computer networking, information centric network, and cryptography & network security. He has published several research papers, and a book chapter. He hold M.Sc. In Physics from Gulbarga University Gulbarga (1990), M.Tech in Computer Science from NITK Surathkal (2000) and Ph.D in Computer Science from MGRRI, Chennai(2009). He has earned GATE Scholarship (1998 ) for his M.Tech course.

### EDUCATION:

**Ph.D** in Computer Science and Engineering from MGRRI, Chennai, (**Dec 2009**).

Thesis: Security Considerations for Internet and Intranet using Natural Numbers.

**M.Tech** in System Analysis and Computer Application from National Institute of Technology, Karnataka (NITK), Surathkal, Karnataka (**2000- First Class with Distinction**) under GATE category. Earned GATE Scholarship for M.Tech course.

Dissertation: Client Server application Development

**M.Sc** in Physics, Gulbarga University, Gulbarga, Karnataka.(**1990-First Class**)

Dissertation: Dual nature of matter- a study.

### DETAILED EXPERIENCE:

#### 8th Aug 2016 – till date

Associate professor, Indian Institute of Information Technology, Dharwad, Karnataka.

#### Engineering Colleges affiliated to Swamy Vivekanand Technical University, Bhilai

**Mar 2013- Aug 2016:** Principal, Kruti Institute of Technology & Engineering, Raipur, C.G. India.

**July 2010 – Mar 2013:** Principal, Pragati College of Engineering and Management, Raipur. C.G. India. .

#### Engineering Colleges affiliated to Visvesvaraya Technical University(VTU), Belgaum.

**Feb 2007 – July 2010:** Professor & HOD, Department of Computer Science and Engineering, Rajiv Gandhi Institute of Technology, Bangalore.

**Aug 2002 – Aug 2006:** Asst. Professor and HOD Department of Information Science and Engineering, New Horizon College of Engineering, Bangalore.

#### Aug 1999 – Aug 2002

System Analyst, Esylib Software Pvt. Ltd, Bangalore, Karnataka.

#### July 1990 – Oct 1998

Lecturer / Sr. Lecturer Department of Engineering Physics, Rural Engg., College, Bhalki, Karnataka.

## **CONSULTANCY AND SOFTWARE DEVELOPMENT (2 YEARS)**

1. Live Market Watch, Bangalore- Developed working prototype on PC for the Live BSE Streaming of stock data in mobile using GPRS based on user profile.
2. TACO Sasken Automotive Electronics Pvt. Ltd. (Tsae), Bangalore – Cluster Demonstration: The UI on PC which will instantiate media player and send commands to the serial port in synchronizations.
3. Startup: Developed a device Bioelectrography- corona discharge intensity detector.

## **PROFESSIONAL ACTIVITIES**

1. Member, Institute of Electrical and Electronics Engineers (IEEE)
2. Member, Computer Society of India (CSI)
3. Life Member, Cryptology Research Society of India
4. Life member, Indian Society for Technical Education
5. Convener -Syllabus Revision Committee for CSE & IT, Chhattisgarh Swamy Vivekanand Technical University, Bhilai(C.G), India. (2014-16)
6. Co-editor of CSVTU Research Journal (2014-16)
7. Reviewer – IEEE Access Journal
8. Reviewer - IETE Journal of Research
9. Convener: Hackthon- 2nd Edition of Mobile 10X #HackForIndia. 5th Nov 2016 at IIIT Dharwad.
10. Convener: Two days workshop on Internet of Thing (IoT) on 22nd and 23rd April 2017, IIIT Dharwad.
11. Member, Local inquiry committee, CSVTU, Bhilai(C.G), (2012-16).
12. Member- CSVTU staff selection committee (2012-16).
13. Member, Governing body of Manasa Polytechnic, Bhilai- CSVTU representative.
14. TPC Member: International Conference on Recent Trends in Image Processing & Pattern Recognition (RTIP2R), Solapur University in collaboration with Universidade de Evora, PORTUGAL and the University of South Dakota, USA (2018)
15. Co-chair for the 5G Security & Privacy Topical Conference track -IEEE 5G World Forum 2018 (<http://ieeewf-5g.org/>)
16. TPC Member: The 1st International Conference on Data, Engineering and Applications 2017 (IDEA-17) Bhopal, India.
17. TPC Member: The International Conference on Engineering Applications & Security (ICETEAS 2018) Jaipur, Rajasthan
18. TPC member: Conference on Information and Communication Technology, CICT-2017, ABV Indian Institute of Information Technology and Management Gwalior, India.
19. Delivered invited talk
20. Certified Internal Auditor for ISO 9000-2000 and NBA Accreditation process (2005)
21. Convener: National Workshop National Workshop on Frontier Research issues in Pattern Recognition & Image processing-2006
22. Convener: National Conference NCKITE-2015 ([www.kiteindia.in/nckite2015](http://www.kiteindia.in/nckite2015))
23. Invited Talk: “Computer Networks and Security”, National Seminar on Routing, Flow, Capacity Design in Computer Networks, Columbia Institute of Engineering and Technology, Raipur, 2013.
24. Judge for the CBSE regional Science Exhibition, Raipur.
25. Organized ROBOKITE-Robotics workshop for students 2013, 2014, and 2015.

## **RECENT CONFERENCE/WORKSHOP ATTENDED**

1. Two days workshop on Internet of Thing (IoT) on 22nd and 23rd April 2017, Indian Institute of Technology Dharwad.
2. QIP Short term course on Tools for Cyber Security: A Laboratory Course (CyberSec\_17) MAY 22 – 26, 2017, IIT Bombay by Information Security Research and Development Center, IIT Bombay (ISRDC)
3. Two weeks Faculty Development programme, organized by DST-NSTEBD, CITCON and KITE, Raipur.

## **JOURNAL PUBLICATION**

1. “Handwritten Kannada Numerals Recognition by Using Deep Learning Neural Network Classifier”, Vishweshwarayya C. Hallur, Rajendra S. Hegadi, R.S. Hegadi, International Journal of Electrical and Computer Engineering, Scopus Indexed, (Accepted for publication)
2. “Handwritten Kannada Numerals Recognition by Using Zone Features and CNN Classifier” (131117-064149), Vishweshwarayya C. Hallur, Rajendra S. Hegadi, R.S. Hegadi, International Journal of Technology and Human Interaction (IJTHI), Volume 15, Issue 4, Article 6. Special Issue Submission: Role of Technology and Human Interaction in Digital Transformation. (In Press), Web of Science Emerging Sources Citation Index (ESCI), SCOPUS, Compendex (Elsevier Engineering Index)
3. “Facial Expression Synthesis Images Using Hybrid Neural Network with Particle Swarm Optimization Techniques”, Deepti Chandra, Rajendra Hegadi , Sanjeev Karmaka, Int. J. of Biomedical Engineering and Technology (IJBET), Scopus(Elsevier) and Emerging Sources Citation Index indexed. DOI: 10.1504/IJBET.2017.10011900.
4. “Techniques of Facial Synthesis: A Comprehensive Literature Review”, Deepti Chandra, Sanjeev Karmakar, Rajendra Hegadi, International Journal of Computer Applications, Vol. 61–No.10, January 2013 pp 34-41.
5. “Design and Development of 8-bits fast multiplier for low power applications”, Vasudev G, Rajendra Hegadi, IACSIT International Journal of Engineering and Technology (IJETCH), Vol 4, No.6, Dec 2012. PP 774-780, Indexed in Engineering Village and IET Inspec.
6. “Lightweight Encryption of Hierarchical Access Control Mechanism Key Using Tribes of Farey Fractions and its Analysis”, Rajendra Hegadi, Ramesh Shahabadkar, Shamshekar Patil, International Journal of Computer Applications. Volume 6, No.3, September 2010, pp 23-28.

## **CONFERENCE PUBLICATION**

### **International:**

1. “Development of an Effective System for Remote Monitoring of Banana Ripening Process”, Amit Verma, Rajendra Hegadi, Kamini Sahu, IEEE International WIE Conference on Electrical and Computer Engineering Wieconece-2015, 19-20 Dec 2015, Dhaka Bangladesh.
2. “Graph Mining Approach for Feedback Analysis”, chitra dhawale, shaligram prajapat, rajendra hegadi, shaifali agrawal, IEEE International WIE Conference on Electrical and Computer Engineering Wieconece-2015, 19-20 Dec 2015, Dhaka Bangladesh.
3. “Performance Analysis of Digital Image Steganographic Algorithm”, N.D. Jambhekar, C.A. Dhawle, Rajendra Hegadi, International Conference on Information and Communication Technology for Competitive Strategies (ICTCS-2014), ACM-ICPS Proceedings.

4. "A New Stream Cipher Using Natural Numbers Based on Conventional Encryption Techniques: MINNSC", Rajendra Hegadi, Second International Conference on Software Engineering and Computer Systems, ICSECS2011, Malaysia. Proceedings CCIS series of Springer, pp 427 -436.
5. "Encoding Hierarchical Access Control Mechanism Key Using Tribes of Farey Fractions", Rajendra Hegadi, Presented at International Symposium on Data, Information and Knowledge Spectrum (ISDIKS 07), Amrita University, Kochin Campus, Kerala., India. Held on December 13<sup>th</sup> -15<sup>th</sup>, 2007.

### **National:**

1. "Facial expression synthesis using landmark points and neural network", Deepti Chandra, Rajendra Hegadi , Sanjeev Karmaka, National Conference Emerging Trends in Science, Technology and Management for National Development-BITCON2016, Held on January 29<sup>th</sup> &30<sup>th</sup> January 2016.
2. "Heart rate variability features measured by ECG signal", Poonam Sao, Rajendra Hegadi , Sanjeev Karmaka, National Conference Emerging Trends in Science, Technology and Management for National Development-BITCON2016, Held on January 29<sup>th</sup> &30<sup>th</sup> January 2016 at BIT, Bilai.
3. "ECG Signal Analysis Using Artificial Neural Network", Poonam Sao, Rajendra Hegadi , Sanjeev Karmaka, Proceeding of National Conference on Knowledge, Innovation in Technology and Engineering, NCKITE-2015, Held on April 10<sup>th</sup> and 11<sup>th</sup> 2015. PP 82-86.
4. "A Survey paper on Facial Expression Synthesis using Artificial Neural Network", Deepti Chandra, Rajendra Hegadi , Sanjeev Karmakar, Presented in National Conference on Knowledge, Innovation in Technology and Engineering, NCKITE-2015, IF: 0.835 , Held on April 10<sup>th</sup> and 11<sup>th</sup> 2015 at KITE Raipur. Published in International Journal of Computer Application (IJCA).
5. "Encoding Access Control Mechanism Key Using Tribes of Gaussian or Rational Farey Fractions", Rajendra Hegadi, Presented at National Workshop on Cryptology 2007 (NWC-2007), Amrita Vishwa Vidyapeetham University, Coimbatore, Tamilnadu, India; 6<sup>th</sup>-8<sup>th</sup> Sep 2007, Sponsored by Cryptology Research Society of India (CRSI).
6. "Protocols for Secure Quantum Key Distribution", Jaya Parsad, Rajendra Hegadi, Shamshekar Patil, Presented at 5<sup>th</sup> National Workshop on Cryptography (NWC-2005), JNNCE, Shimoga, Karnataka, India, 12<sup>th</sup> -14<sup>th</sup>, Aug 2005. Sponsored by Cryptology Research Society of India.

### **BOOK CHAPTER**

1. Book Chapter: Chapter 6: A study on Challenges and Issues of Engineering Institutions in Chhattisgarh to improve the Performance of students of the state, Mr. Yashpal Sen and Dr. Rajendra Hegadi  
Title of Book: Advanced Computer Applications for Digital India: In the Context of Chhattisgarh State (Central India), Chapters compiled from: National Workshop on Advanced Computer Applications for Digital Chhattisgarh, 19th-20th, Feb 2016, BIT Durg (CG).India. ISBN-978-93-5258-574-8

### **COURSES TAUGHT**

1. Computer Networking
2. Cryptography and Network Security
3. Database Systems
4. C Programming
5. C++ Programming
6. Professional Communication.

7. Project Management
8. Engineering Management
9. Discreet Mathematics
10. Advanced Database Systems
11. Object Oriented Analysis and Design
12. Mobile communications
13. COBOL
14. Engineering Physics
15. Digital Electronics

**Dr. Rajendra Hegadi**