

# **Dr. Vijay K. Chaurasiya, Ph.D. (IT)** Assistant Professor, IIIT-Allahabad

## **PROFESSOPNAL SUMMARY**

I am working as an Assistant Professor of Computer Science & Information Technology in the Information Technology Department of Indian Institute of Information Technology, Allahabad. I received Ph.D. in Information Technology (with specialization in Wireless Sensor Networks) from Indian Institute of Information Technology, Allahabad in 2010, Master's Degree in Wireless Communication and Computing from Indian Institute of Information Technology, Allahabad in 2004 and Bachelor's Degree in Computer Science and Engineering from MIET, Meerut in 2001. I have published around 35 papers in reputed International Journals and conference in the area of Network Protocols, Cloud Computing, IoT Protocols, Routing Techniques, Clustering, Localization, Machine Learning and Image Processing. My current research interests include resource utilization in IoT networks, Wireless Sensor Networks, Routing Protocols, Network Security, Load Balancing, Data Backup and Reliability and Information Processing and Security. I have supervised more than 45 Master theses. I am a professional member of Association for Computing Machinery (ACM), IEEE and VIBHA (Vijnana Bharati).

# ACADEMIC QUALIFICATIONS

- **Ph.D. in IT**, with specialization in Wireless Sensor Networks, from Indian Institute of Information Technology Allahabad (U.P.), India in July 2010.
- **M. Tech. in IT**, with specialization in Wireless Communication and Computing, from Indian Institute of Information Technology Allahabad (U.P.), India in June 2004.
- **B.Tech. in Computer Science and Engineering**, from MIET, Meerut (U.P.) India in August 2001.

## **ACADEMIC EXPERIENCE**

- Presently working in IIIT Allahabad as Assistant Professor since June 2010 with AGP 8000 and the job responsibilities include teaching, research and administration.
- I have worked in IIIT Allahabad as a Lecturer from June 2005 to June 2010.
- I am worked as a Research Associate in IIIT-Allahabad since January 2004 to June 2005.

## **ADMINISTRATIVE EXPERIENCE**

• Present: Working as Estate Officer in IIIT Allahabad

to

• Past: Worked in various administrative roles like Warden, Chief Proctor, Associate Dean (Student Affairs) in IIIT Allahabad.

## **AREAS OF EXPERTISE**

- Internet of Things
- Wireless Networks
- Network Performance
- Routing Protocols
- Wireless Sensor Networks
- Wireless LAN
- Mobile Ad-hoc Network
- Network Security

# COURSES TAUGHT SO FAR

- Wireless Networks
- Discrete Mathematics
- Introduction Programming
- Computer Networks
- Network Protocols
- Protocol Implementation
- Protocol Implementation
- Object Oriented Methodology
- Database Management System

## **PERSONAL DETAILS**

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### **PROFESSIONAL SKILLS**

- Teacher
- Author
- Consultant and
- Researcher

## PERSONAL SKILLS

- Team orientated
- Student focused
- Relationship building

### SCHOLARSHIPS AND AWARDS

- GATE (Graduate Aptitude Test Examination) -2002 with 94.81 percentile.
- Received MHRD stipend of Rs.5000/p.m. during M.Tech. at IIITA.
- Got TOEFL score of 97/120.
- Able to create a vibrant and effective learning environment.
- Familiar with a variety of approaches to teaching pupils.
- *Having the ability to motivate and earn the respect of students.*

## **KEY SKILLS AND COMPETENCIES**

- Languages: Java, C, C++, socket programming.
- Internet Tool: XML, HTML, JavaScript, WML, WMLscript, My-SQL, Perl-CGI, PHP
- Operating System: Windows, Linux 8.0
- Network Tools: NS2 Simulator, MATLAB, TinyOS
- Server Application and Network management,
- *Linux programming: C, Perl and Shell* script.

## LABORATORIES DEVELOPED

- 1. Continuous involvement in MBA (IT) and M.Tech (WCC) and M.Tech. (Cyber Lab and Information Technology) lab development, management and maintenance.
- 2. Proposed and developed Network Security and Cryptography Lab for M.Tech (CLIS).
- 3. Developed Wireless Networking and Wireless Sensor Network Lab for M.Tech (WCC).
- 4. Developed Specialized Computing and Research Lab for MBA (IT).

# SELF FINANCED SHORT TERM COURSES CONDUCTED

- 1. Conducted self financed short term course titled: Short Term Training Course on Data Digitization, Data Warehousing and Data Mining. 24th-28th October 2009.
- 2. Conducted self financed short term course titled: Sensitization cum- Awareness Program for Technology Information Facilitation. Lectures on Sensitization cum-Awareness Program for Technology Information Facilitation, from 27 Oct, 2007 to 28 Oct, 2007.

# WORKSHOP/SEMINAR ORGANIZED

- 1. Organizing a Workshop on IoT using Raspberry Pi during 11-12 November 2017 in IIIT Allahabad.
- 2. Member of organizing committee of International Conference on Bioinformatics and Systems Biology (BSB-2016).
- 3. Member of organizing committee of IEEE UP Section Conference on Electrical, Computer and Electronics EEE UPCON-2015.
- 4. Member of organizing committee of 7th International conference on Intelligent Human Computer Interaction (IHCI-2015).
- 5. Member of organizing committee and one of the track coordinator of First International Conference on Management of Technologies & Information Security ICMIS 2010.
- 6. Organized IEEE sponsored Conference on Wireless Communication and Sensor Networks WCSN-2009.
- 7. Member of Organizing Committee of 2 days workshop on Information security (2009).
- 8. Member of the organizing committee if first science conclave Dec, 2009.
- 9. Organized short term training course on Data Digitization, Data Warehousing and Data Mining.
- 10. Member of the organizing committee of second science conclave Dec, 2009.
- 11. Organized IEEE sponsored Conference on Wireless Communication and Sensor Networks WCSN-2008.
- 12. Member of organizing committee of seminar on IT-Vision 2020 organized at IIIT-Allahabad India in Sep, 2007.
- 13. Member of organizing committee of seminar on Information Awareness Program organized at IIIT-Allahabad India in Nov 2007.
- 14. Member of organizing committee of International conference on WCSN organized at IIIT-Allahabad India in Dec, 2007.
- 15. Member of organizing committee of International conference on WCSN organized at IIIT-Allahabad India in Dec, 2006.

16. Member of organizing committee of International conference on WCSN organized at IIIT-Allahabad India in Dec, 2005.

### WORKSHOP/SEMINAR/CONFERENCE ATTENDED

- 1. Attended as one of the track chair International Conference on Bioinformatics and Systems Biology (BSB-2016).
- 2. Attended IEEE UP Section Conference on Electrical, Computer and Electronics EEE UPCON-2015.
- 3. Attended 7th International conference on Intelligent Human Computer Interaction (IHCI-2015)
- 4. Attended as one of the track chair of First International Conference on Management of Technologies & Information Security ICMIS 2010.
- 5. Attended 5 days of technical training program on Storage Technology organized by EMC2 at Amity University, Noida (2009).
- 6. Attended 5 days of short term training program on Information Security and Cyber Law organized by MANIT, Bhopal (2008).
- 7. Attended National Seminar on IPR issues and effect on Indian pharmaceutical industries Indian Institute of Information Technology, Allahabad.
- 8. Attended IEEE sponsored Conference on Wireless Communication and Sensor Networks WCSN-2006 as the organizer.
- 9. Attended International seminar on I.T Trends at IIIT, Allahabad.
- 10. Attended International seminar on Intelligent Signal Processing and Robotics, IIIT-Allahabad.

## **RECOGNITIONS AND AWARDS**

- 1. Certificate of Appreciation for organizing Wireless Communication and Sensor Network Conference- 2007 (WCSN-2007), from IIIT Allahabad on 31 Dec, 2007, 2008, 2009, 2010, 2011, 2012, 2013 and 2014.
- Certificate of Participation from The Institute for Business and Finance Research on 27 May, 2011
- 3. Certificate of Appreciation for IITM Workshop and Conference from IIIT Allahabad on 31 Dec, 2010
- 4. Certificate of Participation from MANIT, Bhopal on 14 Dec, 2017
- 5. Certificate of Appreciation (Science Conclave 2008) from IIIT Allahabad on 25 Dec, 2008
- Certificate of Appreciation for organizing Sensitization -cum-Awareness Program for Technology Information Facilitation from DSIR, New Delhi and IIIT Allahabad on 27 Oct, 2007

#### **OTHER CONTRIBUTIONS**

- 1. Delivered a talk on Knowledge Management in a Program for Technology Information Facilitation jointly organized by IIIT-A and DSIT, New Delhi.
- 2. Member of sport committee of IIIT-Allahabad.
- 3. Active member of organizing committee of Effervescence from 2007 to 2016.
- 4. Active member of Organizing Committee of 2 days workshop on Information security.
- 5. Reviewed papers submitted at WCSN 2007.
- 6. Delivered a lecture on the topic Network Layer Issues in WSN in the preconference workshop organized during WCSN, 11-12 Dec, 2007 at IIIT-Allahabad.
- 7. Delivered an invited talk on knowledge Management in the preconference workshop organized seminar on Information Awareness Program organized at IIIT-Allahabad India in Nov 2007.
- 8. Visited China as a member of delegation send by IIIT-A for 3rd Mission to China (Beijing, Shenyang and Shanghai) for Universities, Business Schools and Institutes of Engineering and Technology from India (Monday, June18 until Sunday, 24 June, 2007).
- 9. Exchanged a letter of intent for academic collaboration with Shenyang University, China.
- 10. Supervised many M.Tech thesis, graduate and undergraduate projects.
- 11. National Seminar on "IPR issues and effect on Indian pharmaceutical industries "Indian Institute of Information Technology, Allahabad.

## **DETAILS OF FUNDED PROJECTS**

- Project Detail: RFID based Real Time Traffic Management System using Internet-of-Things (IoT) Protocols Role: Principal Investigator Funded by: IIIT Allahabad
- Project Detail: Environment Monitoring and Pollution Control using Sensors and IoT Protocols Role: Principal Investigator Funded by: MHRD, GoI
- Project Detail: Hindi to English Machine Translation System for Judicial Domain Role: Co-Investigator (Under Consideration) Funded by: The Ministry of Electronics and Information Technology (MeitY)
- Project Detail: Real Time Traffic Management and Pollution Control using Internet-of-Thing (IoT) protocols Role: Principal Investigator (Presentation Given on 4.11.2017). Funded by: DST
- Project Detail: IT/ITES Role: Member Year: 2009 Funded by: MCIT
- 6. Project Detail: Education through ICT Role: Member

Year: 2010 Funded by: AICTE, Govt. of India

## **PUBLICATION DETAILS**

| Citation indices | All | Since 2012 |
|------------------|-----|------------|
| Citations        | 162 | 155        |
| h-index          | 7   | 7          |
| i10-index        | 7   | 7          |

### A. International Journals [SCI]

- 1. Chaurasiya, V.K. and Saxena, "A novel multi-resolution approach for fingerprint based age-group estimation using Gabor wavelet", under review in International Journal of Pattern Recognition and Artificial Intelligence, World Scientific.
- 2. Chaurasiya, V.K. and Saxena, A.K., 2017. Multi-resolution texture analysis for fingerprint based age-group estimation. *Multimedia Tools and Applications*, pp.1-27.
- 3. Chaurasiya, V.K., Saxena, A.K. and Sharma, S., 2015. Neural network based human agegroup estimation in curvelet domain. *Procedia Computer Science*, *54*, pp.781-789.
- 4. Chaurasiya, V.K., Lal, N., Kumar, S. and Saxena, A., 2015. Detection of malicious node behavior via I-watchdog protocol in mobile Ad Hoc network with DSDV routing scheme. *Procedia Computer Science*, *49*, pp.264-273.
- 5. Chaurasiya, V.K., Jain, N. and Nandi, G.C., 2014. A novel distance estimation approach for 3D localization in wireless sensor network using multi dimensional scaling. *Information Fusion*, *15*, pp.5-18.
- Chaurasiya V.K., Kesarwani A., Gupta C., Tripathi M.M., Gupta V., Gupta R., (2011) Integrating ILM, E-Discovery and DPA 1998 for Effective Information Processing. In: Venugopal K.R., Patnaik L.M. Computer Networks and Intelligent Computing. Communications in Computer and Information Science, vol 157. Springer, Berlin, Heidelberg.

## **B. International Journals [SCOPUS]**

1. Chaurasiya, V.K., Gupta, R., Pinto, A.A., Verma, S., Singh, S. and Srivastava, P., 2011, Securing Cloud System via Internal Control Management, in Proceedings of the World Congress on Engineering 2011, Vol I, pp.481-484.

## C. International Journals [Others]

- 1. Chaurasiya, V.K. and Kumar, S., Prevention of Denial-of-Service Attack in Wireless Sensor Network via NS-2, published in: International Journal of Computer and Communication System Engineering (IJCCSE), Vol. 2 (5), 2015, 708-715.
- 2. Chaurasiya, V.K., Samvedi, A. and Owlak, S. and, 2014. Improved Secure Address Resolution Protocol. arXiv preprint arXiv:1406.2930.
- 3. Chaurasiya, V.K., Chaturvedi, T., Dwivedi, P. and Singh, N., 2013. Whistleblowers' Protection Act 2011, India: A Critical Analysis. International Journal of Advanced

Research in Computer Science, 4(8). [UGC Approved Journal, indexed in EBSCO, DOAJ etc]

- 4. Chaurasiya, V.K., Singh, S.P. and Sethi, J., 2014. Need of Impact Calculation and Measured for Healthcare Privacy Breaches in India, published in: The ISSA Journal, Volume 12, Issue 5, pp 32-38, May 2014.
- 5. Chaurasiya, V.K., Dwivedi, S. and Gupta, W., 2013. Mapping of Data Security Council of India Security Framework with ISO/IEC 27002:2005 and COBIT 4.1, Journal of Global Research in Computer Science, Volume 4, No. 4, 147-154, 2013. [indexed in DOAJ].
- 6. Chaurasiya, V.K., Govil, S.B., Thyagarajan, K., Srinivasan, K., and Das, S., 2012. An approach to identify the optimal cloud in cloud federation. International Journal of Cloud Computing and Services Science, 1(1), p.35. [indexed in CiteFactor].
- 7. .K. Chaurasiya, J. Thomas, K. Raman, S. Das, Resource Leasing Cloud Computing Model: A Win-Win Strategy for Resource Owners and Cloud Service Providers, Published in: Journal of Computing. Volume 4, Issue 5, May 2012. **[DOAJ Journal]**
- 8. Chaurasiya, V.K., Sinha, A., Jaiswal, A. and Gupta, R., 2011. SAS 70 TO SSAE 16/ISAE 3402: An Insight into Outsourcing Security and Process Controls and Significance of New Service Audit Standards. *ISSN 1931-0285 CD ISSN 1941-9589 ONLINE*, p.315. [Indexed in American Economic Association's Econlit, e-JEL and JEL].
- 9. Chaurasiya, V.K., Ardhapurkar, S., Srivastava, T., Sharma, S., and Vaish, A., 2010. Privacy and data protection in cyberspace in Indian environment. *International Journal of Engineering Science and Technology*. **[DOAJ Journal]**

# **D. International Conferences**

- 1. Chaurasiya, V.K., Saxena, A.K. and Sharma, S., 2015, May. Human age-group estimation using curvelet features. In Advances in Computing and Communication Engineering (ICACCE), 2015 Second International Conference on (pp. 610-615). IEEE.
- 2. Chaurasiya, V.K., and Saxena, A.K., 2014, December. Fingerprint based human age group estimation. In India Conference (INDICON), 2014 Annual IEEE (pp. 1-4). IEEE.
- Chaurasiya, V.K., Diwakar, A., Kumar, V., 2014, A quantized Model for Computer Forensic Investigation, published in: Proceedings of 6<sup>th</sup> IRF International Conference, Chennai, India, 10th May. 2014, pp. 20-25.
- 4. Chaurasiya, V.K., Raman, S. and Venkatesan, S., 2012, October. Performance comparison of various information retrieval models used in search engines. In *Communication, Information & Computing Technology (ICCICT), 2012 International Conference on* (pp. 1-4). IEEE.
- 5. Chaurasiya, V.K., Kumar, A., Srivastava, A., Bansal, S. and Raheja, M., 2012, Basel III and the Requirement for Capital Inclusion: A Case of India, Published in: 5<sup>th</sup> International Conference on Management and Behavioral Sciences, "An Interdisciplinary Conference" June, 2012, Society of Management and Behavioral Sciences.
- Chaurasiya, V.K., Chandra, M., Kumar, N., Gupta, R., Kumar, S. and Srivastava, V., 2011, April. Protection from paging and signaling attack in 3G CDMA networks. In *Emerging Trends in Networks and Computer Communications (ETNCC)*, 2011 International Conference on (pp. 406-410). IEEE.

- 7. Chaurasiya, V.K., Srivastava, V., Keshri, A.K., Roy, A.D. and Gupta, R., 2011, April. Advanced port knocking authentication scheme with QRC using AES. In *Emerging Trends in Networks and Computer Communications (ETNCC), 2011 International Conference on* (pp. 159-163). IEEE.
- 8. Chaurasiya, V.K., Kesarwani, A., Gupta, C., Tripathi, M.M., Gupta, V. and Gupta, R., 2011, April. Implementation of Chinese wall model in cloud computing for enhanced security. In *Emerging trends in networks and computer communications (etncc)*, 2011 *international conference on* (pp. 411-413). IEEE.
- 9. Chaurasiya, V.K., Gupta, R., Banerji, S.G. and S. Mohanty, 2011, Information Security Governance is Critical to Wider Corporate Governance Demands - An Indian Perspective, in Proceedings of International Conference on Economics, Trade and Development, (ICETD 2011), Vol. 7, pp:65-68, Bali, Indonesia, April 1-3, 2011.
- 10. Chaurasiya, V.K., Srivastava, P., Singh, S., Pinto, A.A., Verma, S. and Gupta, R., 2011, June. An architecture based on proactive model for security in cloud computing. In *Recent Trends in Information Technology (ICRTIT), 2011 International Conference on* (pp. 661-666). IEEE.
- 11. Chaurasiya, V.K., Srivastava, S., Chandra, S. and Saxena, S., 2010, Honeypot Placement in Network Architecture to Enhancing the Efficiency of IDS System, in Proceedings of First International Conference On Management Of Technologies & Information security "ICMIS 2010". Jan 21-24, 2010, IIIT Allahabad, India.
- 12. Chaurasiya, V.K., Lavavanshi, R.L., Verma, S., Nandi, G.C. and Srivastava, A.K., 2009, March. Localization in wireless sensor networks using directional antenna. In *Advance Computing Conference*, 2009. *IACC* 2009. *IEEE International* (pp. 131-134). IEEE.
- 13. Chaurasiya, V.K., Pathak, A., Biswas, A., Dev, S. and Srivastava, A., 2009, A different approach to risk assessment, in Proceedings of International Conference on Management Technology and Applications (ICMTA 2009), 8-11 Aug, 2009, Beijing, China.
- 14. Chaurasiya, V.K., Kumar, S.R., Verma, S. and Nandi, G.C., 2008, December. Traffic based clustering in wireless sensor network. In *Wireless Communication and Sensor Networks, 2008. WCSN 2008. Fourth International Conference on* (pp. 83-88). IEEE.
- 15. Chaurasiya, V.K., Dhiwal, A.D., Gautam, S. and Singh, A.K., 2008, December. MailZoro-email based P2P file sharing. In *Networks*, 2008. *ICON* 2008. *16th IEEE International Conference on* (pp. 1-5). IEEE. [Tier 1 Conference].
- Chaurasiya, V.K., Dhyani, P. and Munot, S., 2007, December. Linux highly available (HA) fault-tolerant servers. In *Information Technology*,(*ICIT 2007*). 10th International Conference on (pp. 223-226). IEEE. [Tier 1 Conference].
- 17. Chaurasiya, V.K., Dwivedi, S., Shah, Homana, A.M. and Herbst, L., 2006, Heterogeneous Wireless Devices: Networking for Monitoring Application, in Proceedings of International conference on Wireless Communication and Sensor Networks(WCSN), 2006, Allahabad, India.
- 18. Chaurasiya, V.K. and Dwivedi, S., 2005, Managing and Accessing Sensor Network from Internet Browser, in Proceedings of International conference on Wireless Communication and Sensor Networks (WCSN), 2005, Allahabad, India.

## REFERENCES

1. Prof. Dharma P. Agrawal

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(Dr. Vijay K. Chaurasiya)