

FACULTY PROFILE

Name : Dr. Poornima M. Chanal



Designation : Assistant Professor
Department : Electronics and Communication Engineering

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Vidwan Id : 125080

Researcher ID (Web of Science) : AAR-8908-2020

Google Scholar ID : sq_EtqYAAAAJ

Qualification : **Ph.D**
: **11 years**

Administrative Responsibilities :
1. Anti-ragging Coordinator.
2. BoS member for department of Electronics and Communication Engineering.
3. Valuation coordinator for department of Electronics and Communication Engineering for the academic year 2020-21.
4. Member and brand ambassador of Institution Innovation Council (IIC) cell of Basaveshwar Engineering College, Bagalkot.

Teaching :
No. of Projects Guided

UG : 08

PG : 02

Research

Interest Area : Internet of Things, Data Security, Wireless Network

Research Grants : Project title: "Intelligent Authentication Scheme for Internet of Things" selected by VGST in Research Grants Applied for Scientists/Faculty

Publications
Books/Chapters

- scheme (RGS/F) and sanctioned Rs. 3,00,000/-
- : Poornima M. Chanal, Mahabaleshwar S. Kakkasageri, Sunilkumar S. Manvi, "Security and Privacy in Internet of Things: Computational Intelligent Techniques based Approaches", Contributed chapter in book titled, "Recent Trends in Computational Intelligence Enabled Research", Elsevier publisher. **(Citations-17)**

Journals (with citations)

- : 1. Poornima M. Chanal, Mahabaleshwar S. Kakkasageri, Rajani S. Pujar, "Cognitive Agent based Context Aware Authentication Scheme for IoT Devices: Regression Approach", Peer-to-Peer Networking and Applications, Springer (Submitted)
2. Poornima M. Chanal, Mahabaleshwar S. Kakkasageri "Blockchain based Data Integrity Framework for Internet of Things", International Journal of Information Security, Springer (Accepted) **(Citations-01)**
3. Poornima M. Chanal, Mahabaleshwar S. Kakkasageri, "Preserving Data Confidentiality in Internet of Things", Journal of SN Computer Science, Springer, pp. 1-12, 2021. **(Citations-10)**
4. Poornima M. Chanal, Mahabaleshwar S. Kakkasageri, "Security and Privacy in IoT: A Survey", Journal of Wireless Personal Communication, Springer, Vol. 115, No. 3, pp.1667–1693, 2020 **(Citations-118)**
5. Kirankumar B. Balavalad, Ajayakumar C. Katageri, Poornima M. Chanal and Gururaj S. Kori. "Energy Efficient Multipath Routing Protocol with Guaranteed Data Delivery for Wireless Sensor Network", International Journal of Information and Education Technology, Vol. 04, No. 05, pp. 430-435, October 2014. **(Citations-01)**

Conferences

- : 1. Poornima Chanal, Mahabaleshwar S. Kakkasageri, "Random Forest Algorithm based device Authentication in IoT", Proc. of the 9th IEEE International Conference on Electronics, Computing and Communication Technologies, (CONECCT), Bangalore, July 2023
2. Poornima Chanal, Mahabaleshwar S. Kakkasageri, "Secured Data Integrity Scheme for Internet of Things", Proc. of the 2nd Asian Conference on Innovation in Technology (ASIANCON), Pune, August, 2022.
3. Poornima Chanal, Mamata J. Sataraddi, Mahabaleshwar S. Kakkasageri, Rahul Jahagirdar "Performance Analysis of Ant Colony based Routing Approach for VANETs using vanetMobisim and NS2", Proc. of the 11th International Conference on Advanced Computing (ICoAC-2019) December 18-10, 2019. **(Citations-06)**
4. Poornima M Chanal, Mahabaleshwar S Kakkasageri, "Hybrid Algorithm for Data Confidentiality In Internet of Things", proc. of the 10th International Conference on Computing, Communication and Networking Technologies (ICCCNT), IIT Kanpur, 2019, India **(Citations-11)**
5. Poornima Chanal, Mahabaleshwar S. Kakkasageri, Avani Shirbur, Gururaj S. Kori, "Energy Aware Multipath Routing Scheme for Wireless Sensor Networks", Proc. of the 7th IEEE International Advance Computing Conference (IACC-2017), VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad, Telangana, India, pp.385-390, 5-7 January 2017. **(Citations-15)**
6. Poornima Chanal, Mamata J. Sataraddi, Mahabaleshwar S. Kakkasageri, Gururaj S. Kori, "BDI Agent based Routing Scheme in VANETs", Proc. of the IEEE International

- Conference on Wireless Communications Signal Processing and Networking (WiSPNET 2017), SSN College of Engineering, Chennai, India, pp. 129-133, 22-24 March 2017. **(Citations-13)**
7. Poornima M Chanal, Gururaj S Kori, Mahabaleshwar S Kakkasageri, “Energy Efficient Multipath Routing Protocol for Wireless Sensor Networks”, Proc. of the 1st National Conference on Recent Trends in Communication and Computing [NCRTCC-2016], Jain Institute of Technology, Davangere, Karnataka, India, 27th February 2016.
 8. Poornima M. Chanal, Gururaj S. Kori, M. S. Kakkasageri, “Efficient Reliable Routing Scheme for VANETs” Proc. of the 4th IEEE International Conference on Communication and Signal Processing [ICCCSP’15], pp. 937-942, Adhiparasakthi Engineering College, Melmaruvathur, Tamilnadu, India, April 2-4, 2015. **(Citations-04)**
 9. Poornima M. Chanal, Gururaj S. Kori, M. S. Kakkasageri, “Energy Aware Cluster based Routing Scheme in Wireless Sensor Networks” Proc. of the International Conference on Advances in Engineering Technology and Science [ICAETs 2014], pp.134-138, Munnar, Kerala, India, April 26-27, 2015
 10. Poornima M. Chanal, Gururaj S. Kori, M. S. Kakkasageri, “Critical Data Validation Scheme in Vehicular Ad Hoc Networks” Proc. International Conference on Advances in Engineering Technology and Science [ICAETs 2014], pp.139-143, Munnar, Kerala, India, April 26-27, 2015
 11. Poornima M. Chanal, Kirankumar B. Balavalad, Ajayakumar C. Katageri, and Gururaj S. Kori “Energy Efficient Multipath Routing Protocol with Guaranteed Data Delivery for Wireless Sensor Network”, Proc. Of the 3rd International Conference on Educational and Information Technology [ICEIT 2014] January 10-12, 2014 Toronto, Canada.
 12. Poornima M. Chanal, , Ajayakumar C. Katageri, Kirankumar B. Balavalad and Supriya B. H. “Optimization of LEACH Protocol for Effective Power Utilization in Wireless Sensor Networks”. Proc. of the 3rd International Conference on Computational Intelligence and Information Technology [CIIT 2013], IIT Bombay, India, 18-19 Oct 2013. (Citation-01)

Invited Talks

- :**
1. Resource person for student training programme (HRD) at Basaveshwar Engineering College, Bagalkot.
 2. Invited as resource person in the ISTE-SRM short term training programme on “Recent Trends in Embedded System and VLSI” sponsored by ISTE, New Delhi and SRM University, Chennai, on 25-26 June 2013 held at Department of Electronics and Communications, S. R. Vastrad Rural Polytechnic Guledgudd-587203, Karnataka, India.

Events Organized

- :**
1. Coordinator for online session on “Entrepreneurship in the Era of Artificial Intelligence”, under IIC- 5.0 at BEC, Bagalkot on 10th August 2023.
 2. “AVISHKAAR-14” project exhibition conducted by Department of Electronics and Communications, Basaveshwar Engineering College (Autonomous), Bagalkot, 2014.

**Conferences/ Symposiums/
Workshops/ Training
Programs Attended**

Online FDP's

1. ATAL FDP on "Information and Cyber Security" from 2021-6-14 to 2021-6-18 at IIIT Vadodara.
2. ATAL FDP on "AI- Machine Learning & Optimization" from 1-2-2021 to 5-2-2021 at Indian Institute of Information Technology Allahabad.
3. ATAL FDP on "Block chain" from 5-10-2020 to 9-10-2020 at National Institute of Technology Meghalaya.
4. ATAL FDP on "Data Sciences" from 21-9-2020 to 25-9-2020 at National Institute of Technology, Karnataka.
5. One week FDP on "Internet of Things (IoT)", organized by Indian Institute of Information Technology, Nagpur (IIITN), in association with AICTE Training and Learning (ATAL) Academy from 6-10 April 2020.
6. Two week FDP on "Digital Transformation in Teaching Learning Process" (SWAYAM) conducted by IIT Mumbai, from 6-22 April 2020
7. AICTE approved FDP course on "Computer Networks and Internet Protocol (SWAYAM)" conducted by Prof. Soumya Kanti Ghosh and Prof. Sandip Chakraborty, IIT Kharagpur, 27 January 2020 - 17 April 2020
8. Workshop on "AICTE Examination Reform Policy", BEC Bagalkot, 6-7 May, 2020
9. "BOSS Linux Ubuntu Operating System" test conducted remotely from IIT Bombay & jointly organized by Karmaveer Bhaurao Patil College of Engineering, Satara, on 22nd April 2020. The training was offered by the Spoken Tutorial Project, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Govt., of India.
10. "Python 3.4.3" test conducted remotely from IIT Bombay & jointly organized by Dwarkadas Jivanlal Sanghvi College of Engineering, Mumbai, on 9th May 2020. The training was offered by the Spoken Tutorial Project, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Govt., of India.
11. "R Programming" test conducted remotely from IIT Bombay & jointly organized by Sree Vidyanikethan Engineering College (Autonomous), Tirupati, on 29th May 2020. The training was offered by the Spoken Tutorial Project, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Govt., of India.

Offline FDP's

1. Faculty Development Programme on "Recent Advances in Signal Processing and Communication Networks", at Basaveshwar Engineering College, Bagalkot, 17th – 19th March, 2017.
2. Two days International Symposium on "Green Technologies for Sustainable Development", sponsored by TEQIP-II held at Basaveshwar Engineering College (Autonomous), Bagalkot, on 24th to 25th February 2017.
3. One day Workshop on "Research Methodology" organized under TEQIP-II of World Bank at, Basaveshwar Engineering College (Autonomous), Bagalkot, from 19th December 2015.
4. One day Workshop on "Outcome Based Education" organized under TEQIP-II of World Bank at, Basaveshwar Engineering College (Autonomous), Bagalkot, from 18th December 2015.
5. One day Workshop on "Curriculum Development and Reforming for UG & PG", sponsored by TEQIP-II at Department of Electronics & Communication Engineering, Basaveshwar

- Engineering College (Autonomous), Bagalkot, from 25th July 2015.
6. Three days National Level Workshop on “Intel® Atom™ Processor based Embedded System Design and Development” at Department of Electronics & Communication Engineering, Basaveshwar Engineering College (Autonomous), Bagalkot, from 28th to 30th May 2014.
 7. Three days’ workshop on “Advanced Network Computing and Simulation” held in Basaveshwar Engineering College, Bagalkot, 22nd to 24th November 2013.
 8. Five days’ workshop on “Wireless Networking and Testing” held in B V Bhoomaraddi College of Engineering and Technology, Hubli, 28th August to 1st September 2013.
 9. Three days Faculty Development Programme on “Design, Modeling and Simulation of MEMS Devices” held in Basaveshwar Engineering College, Bagalkot, 10th-12th July 2013.
 10. Three days Faculty Development Programme on “Soft and Evolutionary Computing Techniques and its Applications” held in Basaveshwar Engineering College, Bagalkot, 30th May-1st June 2013.
 11. Three days National Level Workshop on “Technical Documentation Using LATEX” held in Basaveshwar Engineering College, Bagalkot, 27th-29th May 2013.
 12. Three days National Level Workshop on “Implementation of Signal Processing Algorithms Using FPGAs” held in Basaveshwar Engineering College, Bagalkot, 23rd-25th May 2013.
 13. Three days Faculty Development Programme on “Recent Advances in Wireless Networks” held in Basaveshwar Engineering College, Bagalkot, 16th -18th May 2013.
 14. Three day training program on “Effective practices of teaching” held in Basaveshwar Engineering College, Bagalkot, 3rd to 5th March 2012.
 15. One day training program on “Human Resources Development” held in KLE Engineering College & Technology, Chikodi, 28th January 2011.