



# SAPTHAGIRI COLLEGE OF ENGINEERING

#14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore-560057, Karnataka, India

DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

## FACULTY PROFILE

Name of the faculty

**Prof. PRERANA CHAITHRA**

Designation

ASSOCIATE PROFESSOR

Contact Number

8028372801

Email ID

preranachaithra@sapthagiri.edu.in



## Educational Qualification

Degree	Specialization	University	Year of Passing
<b>PhD</b>	Software Engineering & Data Science	VTU	Pursuing
<b>M.Tech</b>	Computer Science & Engineering	VTU	2004
<b>B.E.</b>	Computer Science & Engineering	Bangalore University	1997

## Work Experience

Teaching	Research	Industry
20	4	3

## Publications

National/International Journals	National/International Conferences	Books Authored/Edited
8	21	-

## Area of Interest

<b>Software Engineering</b>	<b>Computer Graphics</b>
<b>Data Science</b>	<b>Programming Languages</b>
<b>Computer Networks</b>	

## In House Experience

Sl.No	Designation	Period	
		From	To
1	Associate Professor	July 2017	Till date
2	HOD & Associate Professor	August 2012	July 2017
3	HOD & Professor	June 2007	July 2012

## FUNDED PROJECTS/PATENTS

## Membership in Professional Bodies/University Bodies/Organization

## Publications

### National/International Journals

1. Prerana Chaithra, Shantharam Nayak, " Identification of Ambiguities in Software Requirements using Machine Learning Techniques", Communications in Computer and Information Science (CCIS) series of Springer, January 2020.
2. Prerana Chaithra, Shantharam Nayak, "Quality Assurance Techniques in SRS Documents", Elsevier-Scopus indexed International Journal of Innovative Technology and Exploring Engineering (IJITEE), ISSN:2278-3075, Vol-9, Issue-25, December 2019, pp. 14-18.
3. Prerana Chaithra, Surekha R., Shantharam Nayak "Influence of Mathematics on Software Engineering", International Journal of Management Technology and Engineering, , ISSN: 2249-7455, Vol-9, Issue-5, May 2019, pp.3541-3547
4. Prerana Chaithra, Shantharam Nayak, NandaKumar A. N. " Segmentation and Clustering of Stakeholders using Data Mining Techniques ", Advanced International Journal, ISBN -13915, ISSN: 978-81-936820-0-5, Vol-1, June 2018, pp 482-488,
5. Prerana Chaithra, Vijayalakshmi, Shantharam Nayak, "Analysis of Various Methodologies for reducing Ambiguities in Software Analysis", Indian Technology Congress 2014, Nimhans Convention Centre, Bangalore, 21-22 August 2014, pp. 29.
6. Prerana Chaithra, "Enhancement of the Lifespan in Event-Driven WSN using Anycast Mechanism", First International Conference on Future Computing, ICFC 2012, R.V.College of Engineering, 20th -22nd December 2012, ISBN 978-81-8487-271-2, pp. 31-36.
7. Dr. M. N. Vijayalakshmi, Prerana Chaithra "Anycast Mechanism for Event-Driven WSN by Compressing Delay Time and Extending the Lifetime", Second International Conference on On-Demand Computing ( ICODC-2012), The Oxford College of Engineering , Bangalore, sponsored by IEEE, CSI Chapters, 15th- 16th November 2012, ISBN 978-93-5087-502-5, pp. 13-17.
8. Prerana Chaithra, Rajesh L., "Energy Proficient and Defferment Routing Protocol for WSN" , International Conference on Computer Science and Information Technology (ICCSIT-2010), R.L.J.I.T., Doddaballapur, sponsored by VTU, ISTE, CSI, IETE17th – 18th September 2012, pp. 516-518.

### National /International Conferences

1. Prerana Chaithra, Monika A.G., Namratasree S, Roopa M, Vrinda A., "Extracting Aspects and Mining Opinions for Product Rating", National Symposium, SCE, Bengaluru, April 28, 2019.
2. Prerana Chaithra, Ambarish Parthasarathy, Ankita, Ankita, Adarsh Kumar Humney, "Real Time Object Recognition And Classification Using Tensorflow National Symposium, SCE, Bengaluru,, April 28, 2019.
3. Prerana Chaithra, Ankita Ganapati Bhat, Anusha S., "Real Time Free Parking Slots using IoT Technology", National Symposium, SCE, Bengaluru, April 24, 2018. **(won Best Paper)**
4. Prerana Chaithra, Sneha P., Shruthi K. Pamadi, Suma B.N., Rekha B.C., "An Innovative Approach to Predict the Vulnerability on Trend Languages on Cloud with Third Party Support" National Symposium, SCE, Bengaluru, April 24, 2018.
5. Prerana Chaithra, Ramyashree T. R., Rakshitha K., "Energy Efficient Multipath Routing Protocol for Adhoc Network using Fitness Function", National Symposium, SCE, Bengaluru, April 24, 2018.
6. Prerana Chaithra, Spoorthi Reddy P, Chethan Gowda S, Darshan B.S, Skanda M Bairy "User mode Multi Path Transmission Control Protocol(MPTCP) Proxy", 2<sup>nd</sup> National conference on Emerging Trends in Science and Technology", SCE, Bengaluru, May 12<sup>th</sup> 2015 **(Won 1<sup>st</sup> prize)**
7. Prerana Chaithra, Sharan, Avinash Shukla, Vinay Kumar, Vinay Hegde, "Cluster Based Certificate Revocation with Vindication Capability for Mobile Ad-hoc networks", 2<sup>nd</sup> National conference on Emerging Trends in Science and Technology", SCE, Bengaluru, May 12<sup>th</sup> 2015 **(Won 2<sup>nd</sup> prize)**

8. Prerana Chaithra, Dr. Vijayalakshmi, Dr. Shantharam Nayak, "Analysis of Various Methodologies for reducing Ambiguities in Software Analysis", Indian Technology Congress 2014, Nimhans Convention Centre, Bangalore 21-22 Aug 2014, pp. 29.
9. Prerana Chaithra, Dr.Vijayalakshmi M.N., "Energy Conservation in WSN using Data Clustering", National Conference on Emerging Trends in Computer Science & Technology, SKIT, Bangalore, Oct 26<sup>th</sup> 2013, pp 181-189
10. Prerana Chaithra, Dr.Vijayalakshmi M.N., Meghana "Reduction of Power Consumption in Object Tracking Sensor Networks using Data Mining Algorithm", 6<sup>th</sup> National Conference on Artificial Intelligence and Software Engineering, NHCE, Bangalore, Oct 25<sup>th</sup> 2013, pp 175-179.
11. Prerana Chaithra, Rakshitha Naik, Dr.Vijayalakshmi M.N, "Enhanced Web Usage Mining Algorithm for Data Cleaning", 6<sup>th</sup> National Conference on Artificial Intelligence & Software Engineering, NHCE, Bangalore, Oct 25<sup>th</sup> 2013, pp 121-126. **(Won 2<sup>nd</sup> prize )**
12. Prerana Chaithra, Dr.Vijayalakshmi M.N., Manjunath T.N. "Efficiency Boosting of TeleBAN System using InfoTele technologies", National Conference on Recent Trends in Communication & Networking" , D.B.I.T., Bangalore, 27<sup>th</sup> -28<sup>th</sup> March 2013.
13. Ahay, Umang Goel, Prerana Chaithra "Detection of Fraud Transactions in Credit Cards", National Conference on Emerging Trends in Engineering & Technology, Sapthagiri College of Engineering, Bangalore, 11<sup>th</sup> May 2013, pp. 197-202. **(Won 2<sup>nd</sup> Prize).**
14. Sanjeeb Thakur, Ujjwal Kumar, Prerana Chaithra "Data Cleaning Algorithm for Server Log Files", National Conference on Emerging Trends in Engineering & Technology, Sapthagiri College of Engineering, Bangalore, 11<sup>th</sup> May 2013, pp. 63-68.
15. Supriya H.N, Prerana Chaithra "Efficient Object Tracking in Sensor Networks with the Aide of Data Mining Technique", National Conference on Emerging Trends in Engineering & Technology, Sapthagiri College of Engineering, Bangalore, 11<sup>th</sup> May 2013, pp. 76-82.
16. Sushma K., Prerana Chaithra "Data cleaning of medical data sets", National Conference on Emerging Trends in Engineering & Technology, Sapthagiri College of Engineering, Bangalore, 11<sup>th</sup> May 2013, pp. 105-112.
17. Sneha G., Pavithra Devi, Prerana Chaithra "Association rule and clustering methods for data cleaning", National Conference on Emerging Trends in Engineering & Technology, Sapthagiri College of Engineering, Bangalore, 11<sup>th</sup> May 2013, pp. 132- 136.
18. Prerana Chaithra, Dr. M. N. Vijayalakshmi, Manjunath T.N. "Efficiency Boosting of TeleBAN System using InfoTele technologies", National Conference on Recent Trends in Communication & Networking" , D.B.I.T., Bangalore, 27<sup>th</sup> -28<sup>th</sup> March 2013.
19. Prerana Chaithra, Ramya B.N., "Anycast scheme for increasing the lifespan by the virtue of reduction in the delay time in Event-driven WSN", National Conference on Networking, Image Processing and Multimedia NaCoNIM – 2012, K.S.I.T., Bangalore, 8<sup>th</sup> September 2012, pp. 349-354.
20. Prerana Chaithra, Ramya B.N., "Service framework in virtual sensor networks", MVJ, 2012, vol 4, pp 221-224
21. Prerana Chaithra, Chaithra, Ramya B.N., "Check pointing for Fault Tolerance in Mobile Agent Systems for Distributed Computing", Seventh National Conference on Recent Trends in Computer Science & Engineering (NCRTCSE-12), S.J.B.I.T., Bangalore, cosponsored by IEEE, ACM, 10<sup>th</sup> -11<sup>th</sup> April 2012.

## Faculty Development Programme Participated

- Attended two days Faculty Development Programme on “**Machine Learning and Tools**” organized by Dept. of CSE at S.C.E., Bengaluru on 30/2/2019 and 31/2/2019.
- Attended four days FDP on “Data Analytics, Next Generation Programming Languages and Simulations” funded by Vision Group of Science and Technology (VGST) from 27th to 31st July 2018.
- Attended one week FDP on “**Data Analytics for IoT Applications**” organized by RVCE, Bengaluru from 30/1/2018 to 4/2/2018.
- Attended AICTE sponsored short term FDP on “Advances in Distributed Computing ” at Acharya Institute of Technology, Bangalore in collaboration with WIPRO from 10/07/2013 to 13/07/2013.
- Attended three day FDP on “Network Simulator and Protocol Development using Network Simulator” at M.S. Ramaiah School of Advanced Studies, Bangalore from 23/08/2012 to 25/08/2012.

## Workshop Attended

1. Attended one day conference on “**DCD Bangalore Conference**” organized by Data Center Dynamics Pvt. Ltd. at Sheraton, Bengaluru on 4/7/2019.
2. Attended one day workshop on “**Guidelines for Research Scholars**” organized by R.V.C.E at R.V.C.E., Bengaluru on 15/7/2019.
3. Attended one day workshop on “**UI5con**” organized by SAP Labs at SAP Labs, Bengaluru on 4/7/2019.
4. Attended one day workshop on “**A-View**” organized by VTU at BIT, Bengaluru on 19/2/2018.
5. Attended KSCST Project Evaluation by IISc at MSRIT, Bengaluru on 26/5/2018.
6. Attended a two-days workshop on “**Advances in Computing Tools and Technology**” conducted by CSI & RVCE organized by RVCE supported by the dept. of IT & BT Govt. of Karnataka & CoreEC Technologies at RVCE, Bengaluru from 11/8/18 to 12/8/2018.
7. Attended one day workshop on “**Intellectual Property Rights**” by Mr. C. R. Pradeep and Mrs. Bhavya from KSCST at SCE on 19/11/2016.
8. Attended seminar on “**SDN: Building Data Center Orchestration Products that matter**” by T Murali Venkat, Technical Leader & Architect Cisco Nfvi Business Group, San Jose, USA ON 2/8/16 at SCE.
9. Attended seminar on “**Preventive Vigilance as a tool of Good Governance**” by Dr. T.G.K.Murthy, retired Scientist, ISRO, Bengaluru on 30/10/15 at SCE.
10. Attended seminar on “**Heartfulness Meditation**” by Mr. Anantha Padmanabha at SCE on 31/10/2015.
11. Attended a Technical talk on “**Indian Regional Navigation Satellite System by ISRO**” by Prof. P. Raghuthama Rao, retired ISRO Scientist and Asst. Prof. at SCE on 19/01/2016.
12. Attended a talk on “**Stress Management**” conducted by ISCKON, Bengaluru, at SCE on 19/01/2016.
13. Participated in the Symposium on “**Microsoft: Digital Transformation of Education**” by Microsoft at The Lalit Ashok, Bengaluru on 25/2/2016.
14. Attended a two-day workshop on “**Research Methodology and Latex Training**” organized by VTU at AcIT, Bengaluru from 27/7/15 to 29/7/15.
15. Attended a Technical talk on “**Computer graphics and its applications**” by Mr. Lingaraju, Professor, Dept. of ISE, M.S.R.I. T Bangalore, 28/Feb/20-14.
16. Attended Industrial visit for FDP to WIPRO on 12/07/2013.
17. Attended Defense Research and Development Organization sponsored one day workshop on “Wireless and Adhoc Sensor Networks” at R.V.College of Engineering, Bangalore on 26/04/2013.
18. Attended three day workshop on “Network Simulator and Protocol Development using Network Simulator” at M.S. Ramaiah School of Advanced Studies, Bangalore from 23/08/2012 to 25/08/2012.
19. Attended EMC<sup>2</sup> sponsored EMC Academic Summit 2012 on “Cloud meets Big Data” (under TEQIP) at M.S.R.I.T., Bangalore on 10/02/2012.
20. Attended two day workshop on “Finite Automata and Formal Languages” at PESIT., Bangalore from 26/07/2010 to 27/07/2010.

21. Attended seminar cum training programme on “Recent advances in Parallel and Distributed Computing-Clouds and Grids” (under TEQIP) at M.S.R.I.T., Bangalore on 18/12/2008.
22. Attended “IBM Software Research Meet” at Taj Vivanta conducted by IBM on 10/07/2008.
23. Attended two day workshop on “Multimedia Compression Techniques and Standards” (under TEQIP) at M.S.R.I.T., Bangalore from 13/02/2008 to 14/02/2008.
24. Attended one week Global Service Technical Training on “Storage Technology Foundations” at EMC<sup>2</sup>, Bangalore from 11/12/2006 to 15/12/2006.
25. Attended one week Faculty Enablement Program ( Campus Connect Programme) on “Foundational Computer Science Courses-An Industry Perspective” at Infosys Technologies Ltd., Bangalore from 13/03/2006 to 17/03/2006.
26. Attended ISTE sponsored short term training programme on “Effective Communication and the Art of Assimilative Teaching(ECAT)” at Dr. Ambedkar Institute of Technology, Bangalore from 09/02/2004 to 14/02/2004.

## Awards/Recognition/Achievement/Others

### International Awards

1. **International Award “Glory of India”** by deputy Prime Minister of Thailand His Excellency Korn Dabbaransi in Bangkok, Thailand for outstanding contribution for the progress of the nation and worldwide in the field of Engineering. (For this award they consider people of Indian origin throughout the world).
2. **International Award “Gem of India Gold Medal”** by IIFS in Bangkok, Thailand for contribution in the field of Engineering and Education.

### National Awards

1. **National Award “Pride of India”** in 2018 from IPH for Empowering Women and differently-abled youth and children.
2. **National Award “Best Citizens of India”** in 2013 for Philanthropic works.

### Recognitions

1. Honored by **Government of Karnataka with Certificate of Merit** for securing Rank in SSLC exams
2. Received GNU **Affero General Public License** for developing Open Source Application “gevents”. GPL number : GPL55142683
3. Honored by Seshadripuram PU College as **Eminent Alumni** in 2014.

### Grants Obtained:

1. Grants obtained for conducting four days FDP on **“Data Analytics, Next Generation Programming Languages and Simulations”** funded by Vision Group of Science and Technology (**VGST**) selected under the **Chairmanship of Bharatha Ratna Dr. C.N.R. Rao** from 27<sup>th</sup> to 31<sup>st</sup> July 2018, amount 2.0 Lakhs.
2. Grants obtained for the project **“Real time Free Parking Slots Tracking using IoT Technology”** selected by Indian Institute of Science funded by Karnataka State Council for Science and Technology (**KSCST**) in 2018.
3. Grants obtained for the project **“Aggregate Cryptosystem for Scalable Data Sharing in Cloud Storage”** funded by Karnataka State Council for Science and Technology (**KSCST**) in 2016.

## Achievements:

1. During my tenure as **Head of the Department of ISE** for around 10 years, ISE students secured **4 University ranks ( 1<sup>st</sup>, 2<sup>nd</sup> ranks** in 2010-11, **8<sup>th</sup> rank** in 2012-13 **and 10<sup>th</sup> rank** in 2015-16) **and 4 Gold Medals**, also **Best out Going Student Award** in 2014-15.
2. Won **two First prizes, Best Paper and three Second prizes** for paper presentations in National **Conferences**.
3. **Received funds** for **FDP** from Vision Group on Science & Technology selected under the Chairmanship of **Bharatha Ratna Dr. C.N.R. Rao** in 2017.
4. **Received funds** for the **project** selected by Indian Institute of Science from Karnataka State Council for Science & Technology in 2018.
5. **Received funds** for the **project** selected by Indian Institute of Science from Karnataka State Council for Science & Technology in 2016.
6. Was **University topper** in 3<sup>rd</sup> sem M.Tech in CSE.
7. Was the **Chief Guest** for the “Engineer’s Day” at SPUC in 2018.
8. Was **Judge** for the “Student Project Exhibition” conducted by SKIT, Bangalore in 2017.
9. Was the **Chief Guest** for the “National Science Day” held at Chikkabanavara High School in 2015
10. **Developed the software** for the allotment of Practical examination duties for V.T.U. Karnataka in 2007.
11. **Developed the software** for Attendance report, Marks report and overall Progress report for engineering institution.
12. **Certified Infosys Trainer** and have trained engineering students in the Infosys Campus Connect Programme.
13. **Certified EMC2 Trainer** and have trained engineering students.
14. Have guided projects in the Annual National Software Development Program by IBM.
15. **Started Cybernetix S-Pro center** in rural institution for CSE/ISE students.
16. Paper Reviewer for National Conference Emerging Trends in Engineering and Technology’ NCIS- 2013.
17. **Started Student Forum arlSton** for ISE students of SCE.