# **ACTIVITY NAME**: ONE DAY TECHNICAL TALK ON PARALLEL COMPUTING.

# Resource Person: Dr. Geetha V

ASSISTANT PROFESSOR, Dept. of IT, NITK, SURATHKAL, DK, KARNATAKA

NUMBER OF PARTICIPENATS: 127 STUDENTS

DATE: 11-07-2021

TIME 11 AM TO 12.00 AM

# **DESCIPTION ABOUT THE PROGRAM:**

TALK on parallel computing explains about a procedure of solving computational problems by using different compute resources. In this talk students can find detailed explained about parallel computing. Final year CSE students can use parallel computing topic as seminar topic and paper presentation.

STAFF COORDINATOR Signature

**HOD** Signature

Professor and H.O.D.

Department of Computer Science and Engg.

Adichunchanagiri Institute of Technology

CHIKMAGALUR - 577102

## GEETHA V

Official Website: https://infotech.nitk.ac.in/faculty/geetha-v
Assistant Professor Grade -I
Dept of IT, NITK, Surathkal, Mangaluru, DK, Karnataka, India - 575025

#### WEBSITE AND INDEXING

Website: https://infotech.nitk.ac.in/faculty/geetha-v

 $\textbf{Scopus:}\ https://www.scopus.com/authid/detail.uri?authorId=55788422100$ 

 ${\bf Publon:}\ https://publons.com/wos-op/researcher/5361610/geetha-vasantha/$ 

 $\textbf{Google Scholar:} \ \text{https://scholar.google.co.in/citations?user=D61w8AsAAAJhl=en}$ 

#### **EDUCATION**

National Institute of Technology Karnataka, Surathkal

September 2015

Doctor of Philosophy (Ph.D)

Department of Computer Science and Engineering

NMAM Institute of Technology Nitte, VTU, Belagavi

May 2004

Master of Technology (M.Tech)

Department of Computer Science and Engineering

KVG College of Engineering, Mangalore University

May 1999

Bachelor of Engineering (B.E)

Department of Computer Science and Engineering

#### WORK EXPERIENCE

Assistant Professor Grade -I

March 2018 - Till Date

Department of Information Technology

NITK, Surathkal

**Assistant Professor** 

March 2008 - May 2018

 $Department\ of\ Information\ Technology$ 

NITK, Surathkal

Assistant Professor

Senior Lecturer

December 2006 - March 2008

Department of Computer Science and Engineering,

NMAMIT, Nitte, Karkala

April 2005 - November 2006

Department of Computer Science and Engineering,

NMAMIT, Nitte, Karkala

April 2000 - April 2005

Lecturer
Department of Computer Science and Engineering,

NMAMIT, Nitte, Karkala

#### HONORS AND AWARDS

- M.Tech Second Rank in Visvesvaraya Technological University, Belagavi
- Young Faculty Research Award 10 Lakhs (Feb 2019 to Feb 2021)

- Elevated to Senior Member, IEEE (2020-21)
- Best paper award in Eighth International Conference on Communication Networks (ICCN 2014)

#### AREAS OF INTEREST

Computer Networks, Wireless Sensor Network, Internet of Things Parallel Computing, Computer Architecture, Artificial Intelligence

#### SPOSORED PROJECTS

PI, Young Faculty Research Fellowship (YFRF) 2019-2021, by Visvesvaraya Ph.D. Programme of Ministry of Electronics and Information Technology, MeitY, Government of India. Title: Communication Techniques for Multi-modal Data Transmission in Internet of Things. (10 Lakhs)

PI, TEQIP Sponsored, Title: Study on ICT Applications in Micro and Small Enterprises: Problems, Prospects and Concerns. (Rs. 95,000) (2016-17)

PI, Seed Grant, NITK Surathkal, Title: Wireless Sensor Networks (2008-2010)

#### COURSES TAUGHT

#### **Undergraduate Courses**

Parallel Computing

Computer Communication and Networking

Mobile Computing

Wireless Sensor Networks

Technologies for Internet of Things

Operating Systems

Data Structures & Algorithms

Computer Graphics

Microprocessor and Interfaces

Advanced Microprocessor Systems

#### Graduate Courses

Mobile Computing

Designing Internet of Things

Wireless Sensor Networks

Operating System

Advanced Computer Architecture

Computer Networks

#### **PUBLICATIONS**

## Publication in International Journals

Total 12

Geetha V, Archana Bhat, Thanmayee "IPv6 Address Compression Techniques for 6LoWPAN Header Compression". IEEE Access,[SCIE] (Accepted).

Salvi S, Vasantha G. An Optical Camera Communication Using Novel Hybrid Frequency Shift and Pulse Width Modulation Technique for Li-Fi. Computation. 2022; 10(7):110. https://doi.org/10.3390/computation10(Scopus indexed in the name of Vasantha Geetha)

Archana Bhat and Geetha V HopCount, ETX and ENERGY Selection Based Objective Function (HEE\_OF), Int. J. of Wireless and Mobile Computing (IJWMC) (Accepted)

Geetha V and Kumar Ganpati Nandan, Performance Analysis of Image Transmission for Event Detection in Cloud Based IoT Using Raspberry Pi, Journal of Advanced Research in Dynamical and Control Systems, Scopus Indexed, ISSN 1943023X , pp 4857, 2018 (Scopus Indexed)

Geetha. V and Pranesh V. Kallapur, Web Security: Research Challenges and Open Issues, Lecture notes in Electrical Engineering, Volume 121, Year 2012, Publisher: Springer, Pg 397404, (Scopus Indexed)

Pranesh V. Kallapur, Geetha.V, Web Security: A survey of Latest Trends in Security Attacks, Lecture notes in Electrical Engineering, Volume 121, Year 2012, Publisher: Springer Pg 405-415. DOI:10.1007/978-3-642-25541-0\_52 (Scopus Indexed)

Aditi Vutukuri, Saayan Bhattacharya, Tushar Raj, Shridhar, Geetha.V, "Enhanced back-off Technique for IEEE 802.15.4 WSN Standard, Networks and Communications (NetCom2013), Proceedings of the Fifth International Conference On Networks and Communications, Lecture Notes in Electrical Engineering 284, DOI 10.1007/978-3-319-03692-2\_2. (Scopus Indexed)

Geetha.V and K. Chandrasekaran, A Distributed Trust Based Secure Communication Framework for Wireless Sensor Networks, Journal of Wireless Sensor Networks, Scientific Research. Volume 6, Issue 9, pp 173183, 2014. DOI: 10.4236/wsn.2014.69017

Geetha.V and K. Chandrasekaran, TFSR: Trust Factors Evaluation Based Secure Routing Protocol for Wireless Sensor Networks, International Journal of Trust Management in Computing and Communication, (IJTMCC), Inderscience. Volume 3, Issue 1, 2015. DOI: http://dx.doi.org/10.1504/IJTMCC.2015.072465

Vikas N P, Raunak Omar, Sunil Kumar S, Aravinda, Geetha.V, Performance Enhancement of BWR Mechanism in 802.16 WiMAX Networks by Cyclic Prefix Insertion and Circularity, International Journal of Computer Networks and Wireless Communications (IJCNWC) Vol.3, No.4, pp 362369, August 2013. www.ijcnwc.org/papers/vol3no42013/7vol3no4.pdf

Geetha.V and Prof. K. Chandrasekaran, Enhanced Beta Trust Model for Identifying Insider Attacks in Wireless Sensor Networks, International Journal on Computer Science and Network Security, Vol. 13 No. 8 pp. 1420, August 2013. http://paper.ijcsns.org/07\_book/201308/20130803.pdf

Geetha. V and K. Chandrasekaran, Trust factor based LEACHC protocol for Wireless Sensor Networks, International Journal of Computer Applications (IJCA), Volume 105, Issue, 18, pp 4348, 2014, DOI:10.5120/18700-9895

Geetha.V and Pranesh, Research Challenges in using Mobile Agents for Data Aggregation in Wireless Sensor Networks with Dynamic Deadlines, International Journal of Computer Applications (IJCA) 30(5):34-38, September 2011, Published by Foundation of Computer Science, New York, USA. DOI: 10.5120/3636-5079.

Geetha.V and K. Chandrasekaran, Identification of Parameters and Trust Factors for Trust based Communication in Wireless Sensor Networks", International Journal of Information Processing, Volume 8, Issue 4, pp 1-11, http://www.ijipbangalore.org/abstracts\_8%284%29/p1.pdf

Book Chapters

Total 01

Geetha V, Sowmya Kamath, Sanket Salvi, "Chapter 15: Smart Home Environment: Artificial Intelligence Enabled IoT Framework for Smart Living and Smart Health", AI-Based Services for Smart Cities and Urban Infrastructure, September 2020, IGIGlobal, DOI: 10.4018/978-1-7998-5024-3

Publication in International Conferences

Total 30

Geetha.V and K. Chandrasekaran, Identification of Parameters for Trust Management in Wireless Sensor Networks, in Proc. of eighth International Conference on Communication Networks (ICCN 2014), Elsevier, 26th -27th July 2014. pp. 154-161. (Best Paper Award)

Anupama Sikchi and Geetha. V, MRPLA: Multi-hop Routing Protocol for Large Area Wireless Sensor Networks, in Proc. of eighth International Conference on Communication Networks (ICCN 2014), Elsevier, pp. 214-221.

Adarsh D K, Froila Dsouza, Chandrakanth U, Prajwal R Prasad, Geetha V, Wireless Sensor Network Simulator for Routing Protocols, in Proc. of eighth International Conference on Communication Networks (ICCN 2014), Elsevier, 26th -27th July 2014, pp. 330-337.

Geetha.V, K. Chandrasekaran, Shridhar Sanshi, Anupama Sikchi, Trust Based Centralized Low Energy Adaptive Clustering Hierarchy (LEACH-C) for Wireless sensor Network, In proc. of Second International Conference on Emerging Research in Computing, Information, Communication and Applications, by Elsevier, 1st – 2nd August 2014, pp.468-474.

Shashank P and Geetha.V, Trace Time Delay Between Base Station and Service Stations in Different Scenarios of WiMAX Networks: Using NS3, In proc. of Second International Conference on Emerging Research in Computing, Information, Communication and Applications, Elsevier, 1st – 2nd August 2014, pp. 435-440.

Geetha V, Aithal S, Chandrasekaran K, Effect of Mobility over performance of the ad hoc networks, Proceedings of 2006 International Symposium on Ad Hoc And Ubiquitous Computing pages 138-141. (Scopus Indexed)

### PROFESSIONAL ACTIVITIES

Reviewer, International Conference on Next Generation Intelligent Systems (ICNGIS 2022) being organised by Rajiv Gandhi Institute of Technology and technically cosponsored by IEEE Kerala Section and IEEE Industry Applications Society and financially cosponsored by TEQIP II Vellore, Pampady, Kottayam. 29-31 July 2022.

Resource Person, Five Days Online Faculty Development Programme on Research Trends and Applications of IoT, 23 May 2022 27 May 2022, Organized by Department of Computer Science and Engineering SCMS School of Engineering Technology, Vidya Nagar, Palissery, Karukutty, Ernakulam 683582, Topic: Design and Architecture of IoT

Technical Committee Member, IEEE International Conference on Distributed Computing, VLSI, Electrical Circuits and Robotics (DISCOVER -2021), November 19-20, 2021, NMAMIT, Nitte.

Resource Person AICTE Sponsored Online Short Term Training Program on Focuses on Learning the Scope of Security Aspects and Applications, 26 – 31 July, 2021. Topic: Security Aspects in Protocol Stack of Internet of Things.

NPTEL Translation in Kannada Translated the course files of Introduction to Programming in C, for 2.75 hours in Kannada offered by IIT Kanpur. July 2021.

Resource Person A five Days Online FDP on "Emerging Trends in Information Technology" 15-19th March 2021, conducted by St Joseph Engineering College, Vamanjoor, Mangaluru.

Organizing Chair, Eighth Edition of International Conference on Frontiers of Intelligent Computing: Theory and Applications, (FICTA 2020), 4-5 January 2020

Reviewer, B-HTC 2020: 2020 IEEE Bangalore Humanitarian Technology Conference, Vijapur, October 8-10,2020

Coordinator, One week National Workshop on High Performance Computing and Applications (HPCA 2019), 12th- 17th August 2019.

Resource Person, FDP on Advanced Pedagogical Innovations in Higher Education & Effective E-Content Development" 27th July 2020 to 31st July 2020. Govt Polytechnic College, Ramanagar.

Resource Person Four days online FDP on Network and Security, 26th May 2020 to 29th May 2020, NAMMIT, Nitte

Coordinator, TEQIP-III Sponsored One week Workshop on Predictive Analysis and its Applications (PAA 2019) 14th - 18th January 2019.

Session Chair, Eighth Edition of International Conference on Frontiers of Intelligent Computing: Theory and Applications, (FICTA 2020), 5th January 2020

Technical Committee Member, IEEE International Conference on Distributed Computing, VLSI, Electrical Circuits and Robotics (DISCOVER -2020),October 30-31, 2020, SMVITM Bantakal, Udupi.

Resource Person for the AICTE sponsored Faculty Development Program on Emerging Trends in Medical Image Processing and its Applications at AIT, Chikmagalore, 2019

Technical Committee Member, Smart India Hackathon 2019 at NITK Surathkal.

Coordinator, NITK-HPE Workshop on Computer Networks 2019.

Coordinator, One day Workshop on Internet of Things 2019.

Coordinator, Two Days NITK-RDL Makeathon 2019

Coordinator, HP Enterprise Workshop on Experience the Power of HPC, 2019

Session Chair, 4th International Conference on Applied and Theoretical Computing and Communication Technology (iCATccT-2018),6-8 September 2018, Alva's Institute of Engineering and Technology, Moodabidri.

Coordinator, One day workshop on Internet of Things in collaboration with Research Design Lab 2017.

Coordinator, One day workshop on Intel HPC Code Modernization (Parallelization),

 ${\bf Reviewer},$  International Conference o Emerging Trends in Engineering (ICETE 2017), NMAMIT, Nitte

Session Chair, National Conference on Emerging Trends and Advances in Information Technology (NCETAIT 2016), 29th -30th January 2016, AIT Chikmagalore 2016.

Session Chair, Second National Conference o Emerging Trends in Computer Science and Engineering (NCETCSE 2016), 29th April 2016, BGSIT, Mandya.

### INDUSTRY SPONSORED LABORATORIES SET-UP

HP Enterprise sponsored High Performance Computing Lab (High-end Servers and switches donated by HP Enterprise, Bangalore)

IoT and Data Analytics Lab (in collaboration with RDL Technologies, Mangalore)

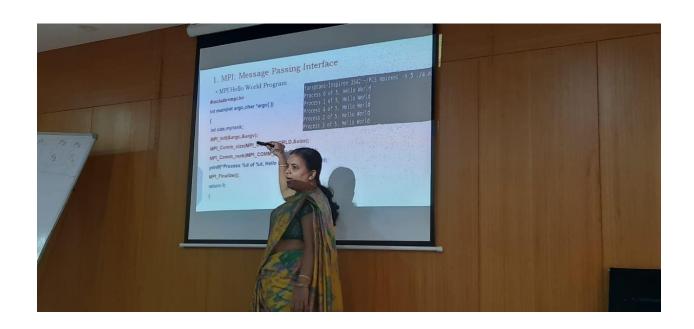
#### RESEARCH GUIDANCE

# ONE DAY TECHNICAL TALK ON PARALLEL COMPUTING RESOURCE PERSON: DR.GEETHA V. ASSISTANT PROFESSOR, Dept. of IT, NITK SURATHKAL,DK,KARNATAKA





Resource Person Dr.Geetha V, Assistant Professor, Dept. of IT, N.I.T.K Surathkal, D.K delivered
One Day Technical Talk On Parallel Computing On 11.07.2021





Resource Person Dr.Geetha V, Assistant Professor, Dept. of IT, N.I.T.K Surathkal, D.K delivered One Day Technical Talk On Parallel Computing On 11.07.2021





Facilitation for Resource Person Dr.Geetha V,Assistant Professor, Dept. of IT, N.I.T.K Surathkal,
D.K who delivered One Day Technical Talk On Parallel Computing On 11.07.2021