

FACULTY PROFILE

Dr. Chetana Prakash

Professor

CS & E Department,

BIET, Davangere-577004

Email: chetana.p.m@gmail.com

Mob: +91-9620527561

Areas of Interest:

Speech Signal Processing, Analysis and Design of Algorithms, Discrete Mathematical Structures, Speech Signal Processing, Fuzzy Technique, Artificial Neural Networks, Image Processing, Speech Systems, System Simulation And Modeling, Data Mining, Multimedia systems, Distributed Database, Computer Organizations, Operating Systems, Pattern Recognition, Computer Systems, Digital Signal Processing, Time Frequency Analysis.

Teaching experience

Sl.N o	Designation	From	To
1	Professor	December 2013	Till Date
2	Associate Professor	Aug 2012	November 2013
3	Assistant Professor	September 2005	2012
4	Senior Lecturer	March 2005	August 2005
5	Lecturer	April 1991	March 2005

Subjects Taught:

Discrete Mathematical Structures, System Software and Compiler Design, Logic Design, Computer Organizations, Probability Statistics & Queueing, Operating Systems, Unix System Programming, Object Oriented Programming, Analysis & Design of Algorithms, System Software, Advanced Algorithms, Storage Area Network, Database Management Systems,

Advanced DBMS, System Simulation & Modelling, Software Engineering, Web Technologies, Operation research.

Education details

Sl.No	UG/PG	University	Year	Result
1	Ph.D (CS & E)	International Institute of Information Technology (IIIT) Hyderabad (Deemed University)	2013	Courses CGPA=8.23/10
2	MS(System Software)	BITS Pilani	1996	CGPA=8.00/10
3	B.E(CS&E)	UBDTCE., Davangere (Mysore University)	1990	First Class

Awards:

- Travel Grant Award from Microsoft Research for presenting paper abroad.

Responsibility:

- As a Subject Expert for setting up the question paper for the UPSC Examination during the year 2019-2020 (16th, 17th and 18th of Jan 2018, 20th, 21st, and 22nd Feb 2019 and 27th, 28th and 29th of May 2019)
- BOS(Board of Studies in VTU) member for the year 2016-2019
- As a BOE chairman for the year 2015-2016
- As a BOE 2 times member in VTU University for the year 2013-14, 2014-15
- BOE 3 years as member in the Kuvempu University
- Working as a NODAL Officer for AISHE (MHRD) Institute.
- Session chair in IWSSIP 2011 18th International conference on Systems, Signals & Image Processing, 16-18 June 2011, Sarajevo, South-East Europe.
- Session Chair and Paper Reviewer in International Conference on “Applied and Theoretical Computing and Communication Technology” (iCATccT-2015) held at BIET, Davangere in 2015

Professional Affiliation:

M.I.S.T.E., CSI

Expert Lectures Delivered:

- One day Invited Talk on “Machine Learning and Deep Learning” on 14th September 2019 at Alvas Institute of Engineering and Technology, MIJAR, MOODBIDRI
- Speaker in One-week short term course training program on “Introduction to Statistical Analysis and Machine Learning” 12-17 December 2016 in Association with ISTE Approved organized by Dept. of Information Technology, MPSTME Mumbai.
- One week training program for students on “ Speech Signal Processing” in the year 2011
- One week workshop on “ Unleash the full potentials of Linux” in the year 2003

Project Work Carried during Research Period

- Feasibility of Ultra low-bit rate coding for transmission and storage of speech (2007-10) DRDO Bangalore
- Efficient representation of speech from throat microphone for transmission and storage of speech information (2007-10) DRDO Bangalore
- Virtual Lab for Speech Signal Processing (2010-2011)MHRD Govt., of INDIA

Research Area: Bessel features for Speech Signal Processing

R&D: Guiding 7 Students for their research work

Publications in conferences:

- Dr. Chetana Prakash, Kavitha G, IEEE 5th International Conference on Inventive Computation Technologies (ICICT 2020), February 26-28th 2020 at Coimbatore, “Noise Reduction Using Multilevel Hybrid Filters for Ultrasound Images: A Comparative Study”
- Dr. Chetana Prakash, Saurav Verma, Kshuboo Jain, 3rd International Conference on Innovative Computing and Communication (ICICC – 2020), “ An Unstructured to Structured Data Conversion using Machine Learning Algorithm in Internet of Things (IoT)

- Dr. Chetana Prakash, Reshma, 3rd National Conference on Recent Trends in Electronics & Communication – 2017 (NCRTEC-2017), “ Survey on Infotainment System for Vehicular Adhoc Networks”, 12th May 2017 at Global Academy of Technology
- Saurav Verma, Dr. Chetana Prakash, Shivangi Vashi, IEEE International Conference on I-SMAC (IoT in Social, Mobile, Analytics & Cloud)(I-SMAC-2017), Paper “**Internet of Things (IoT) A vision, Architectural Elements and Security Issues**” on Feb 10-11 2017 at SCAD Institute of Technology, Palladam, Tamilnadu
- Mrs. Chetana Prakash & Dr. Suryakanth V Gangashetty, International Conference of Emerging Research in Computing, Information, Communication and Applications paper is “ **Robust Speech Recognition using FBCC for WSJ Database**” on 02-03 August 2013 at NMIT Bangalore.
- Mrs. Chetana Prakash and Suryakanth V. Gangashetty, “**Fourier Bessel cepstral coefficients for robust speech recognition**”, International conference on signal processing and Communication (SPCOM 2012) IISc Bangalore, July 22-25, 2012.
- Mrs. Chetana Prakash andSuryakanth V. Gangashetty, “**Fourier Bessel based cepstral coefficients features for text-independent speaker identification**”, The 5th Indian International conference on Artificial Intelligence (IICAI 2011) SIT Tumkur, pp. 913-930, December 14-16, 2011.
- Mrs. Chetana Prakash, Dhananjaya N, and Suryakanth V. Gangashetty, “ **Exploring Bessel features for detection of glottal closure instant**”, INTERSPEECH, pp. 1985-1988, Aug. 28-31, 2011.
- Mrs. Chetana Prakash, N. Dhananjaya, and Suryakanth V. Gangashetty, “**Bessel features for detection of voice onset time using AM-FM signal**”, 18th International conference on signal systems and image processing (18th IWSSIP 2011), pp. 139-142, June 16-18, 2011, Sarajevo (Bosnia and Herzegovina) Europe.
- Mrs. Chetana Prakash, N. Dhananjaya, and Suryakanth V. Gagashetty, “ **Detection of glottal closure instants from Bessel features using AM-FM signal**”, 18th International conference on signal systems and image processing (18th IWSSIP 2011), pp. 143-146, June 16-18, 2011, Sarajevo (Bosnia and Herzegovina) Europe.
- Venkata Ashok Kumar Potnuru, Chetana Prakash, BalakrishnaLavu, and Suryakanth V. Gagashetty, “**Bessel features for estimating number of speakers from multispeaker speech signals**”, 18th IWSSIP 2011, pp. 1747-150, June 16-18 2011, Sarajevo (Bosnia and Herzegovina) Europe.
- BalakrishnaLavu, Chetana Prakash, V. Ashok Kumar, and Suryakanth V. Gangashetty, “ **Speech enhancement using ICA with Bessel features**”, 18th IWSSIP 2011, pp. 155-158, June 16-18 2011, Sarajevo (Bosnia and Herzegovina) Europe.
- Gangamohan V. paidi, Chetana Prakash, and Suryakanth V. Gangashetty, “ **Bessel Transform for Image Resizing**”, 18th IWSSIP 2011, Sarajevo (Bosnia and Herzegovina) Europe.

Publications in Journals:

- **“Advancement in infotainment system in automotive sector with vehicular cloud network and current state of art”** International Journal of Electrical and Computer Engineering (IJECE), Vol. 10, No.2, April 2020, Pages 2077-2087
- **“Understanding the need of Data Integration for E-Healthcare”** International Journal of Trend in Scientific Research and Development (IJTSRD), May 2020
- **“A Study on Issues and Challenges of Indian Healthcare systems and proposed solution”** International Journal of Management, Technology and Engineering, Vol IX Issue V May 2019, ISSN No: 2249 - 7455, page No. 4165 - 4173

- **“A Comparative study of Median, ANW, NLM and proposed Hybrid Filtering Technique using Median and ANW Filter for Medical Images”** in International Journal of Computer Science (IJCS), Volume 5, Issue 8, August 2017, ISSN 2312-5992, page: 33-38, Impact factor: 3.8, by Chetana Prakash, Kavitha G, Shashirekha H
- **“Privacy Preserving Mechanism for Mobile Healthcare Emergency”** in International Journal of Advanced Research in Science Engineering & Technology(IJARSET) , Volume 4, Issue 7 July 2017, page: 4328 – 4333,ISSN (Online): 2350 – 0328, Certificate No: IJA40808012,Impact factor: 6.2, by Chetana Prakash & Sofiya T
- **“A Framework for Hierarchical Big Image Data”** inInternational Journal of Innovative research in science Engineering & Technology , Vol. 6, Issue 7, page: 16707 – 16712, July 2017 (IJRCCE) ISSN(Online): 2319-8753 ISSN (Print): 2347-6710, Certificate No: V6I08C173, Impact factor: 3.7, by Chetana Prakash & Pavan Kumar E
- **“ Big Data Mining from Social Networking Services using Spectral Clustering Algorithm”** in International Journal of Innovative research in Computer & Communication Engineering (IJRCCE), Volume 5, Issue 6, page: 11666 – 11673, June 2017, Impact factor: 6.577,Azizkhan F Pathan and Chetana Prakash
- **“ A Secure Erasure Code-Based Storage using proxy re-encryption”** Accepted research paper for the international Journal of Scientific & Engineering Research (IJSER), ISSN: 2229-5518, 10 May 2017, by Manasa G &Chetana Prakash[**Only Accepted**]
- **“A Review on Intelligent Parking System using Internet of Things (IoT)”** Accepted research paper for the international Journal of Scientific & Engineering Research (IJSER), ISSN: 2229-5518, 20 December 2016, by Manasa G & Chetana Prakash [**Only Accepted**]
- **“Infotainment Frameworks for VANET”**, International Journal of Current Research, Vol. 8 Issue 12, Page: 44243-44247, Impact factor: 7.08, by Reshma S , Haseeba Yaseen &Chetana Prakash
- **“Scalable Concurrent Multipath Video-Audio Streaming Over Wireless LAN”**, International Journal of Emerging Technology in Computer Science & Electronics (IJETCSE), ISSN: 0976-1353, Vol. 23, page: 45 – 49, Issue 5, September 2016, Impact factor: 1.023, by Usha C &Chetana Prakash

- **“Simplified Data Search on Frequent Weighted Item-set Mining by means of Map Reduce”** IJIRCCE International Journal of Innovative research in Computer & Communication Engineering, Vol. 4, Issue 7, page: 14548 – 14553, July 2016, Impact factor: 3.7, by Anusha M & Chetana Prakash
- **“Analysis of acoustic events in speech signals using Bessel series expansion”** Circuits Systems and Signal Processing, vol. 32, page: 2915 – 2938, 2013, Impact factor: 1.07, by Chetana Prakash, Dr. N. Dhananjay and Dr. Suryakanth V. Gangashetty
- **“Robust Speech Recognition using FBCC for WSJ Database”** ELSEVIER Journal Publications 2013 page 275-279, Impact factor: 3.6, ISBN: 9789351071020
- **“Text Independent Speaker Identification Using Bessel Features”** International Journal of Computer and Electrical Engineering, Vol. 4, No. 5, October 2012

Workshops/Events Organized:

Workshop organized and coordinated:

- Three day Hackthon on IOT, AI and ML at CS&E Department BIET Davangere on 19th, 20th and 21st of September 2019 in Association with Smart Bdrige and IBM
- Two Days Workshop on **Data Analytic using R-Tools** at BIET., Davangere on 30 and 31st Aug 2017
- In association with CS&E department involved in organizing 3 Days International Conference on Applied and Theoretical Computing and Communication Technology (iCATccT – 2015) at BIET, Davangere during 29 – 31 Oct 2015
- One day workshop on “Professional application development using .NET ” on 21 August 2015 organized at Department of Master of Computer Applications in association with Bhoomi Softwares, Davangere
- Two days workshop on “Insight on advanced Java with exposure to Selenium & eCommerce” on 22nd & 23rd August 2014 organized at Department of Master of Computer Application, MCA Forum, in collaboration with Mahat Consulting, Bangalore.
- One day workshop on “Android Application Development” on 26th March 2014 organized at Department of Master of Computer Application, MCA Forum, in association with ISTE Students’ Chapter, BIET, Davangere.

Seminar organized:

- One day Orientation Programme on “Preparation for UGC-NET and SLET Examination” in association with NSS, BIET, Davangere on 19th April 2017
- One day Seminar on “Introduction to AngularJS” on 27th February 2017, Organized by MCA forum and Dept. of MCA, Bapuji Institute of Engineering and Technology.
- One day Seminar on “Open Source Intelligence – Network, Application & Security” on 31st August 2016, Organized by MCA forum and Dept. of MCA.
- One day seminar on “Markov Chains and its Applications” on 22nd April 2016 organized by MCA forum and Dept. of MCA.
- One day seminar on “Java Crystals” on 6th April 2016 organized by MCA forum, Dept. of MCA.

- MCA Forum organized by Group Discussion(GD) on “Effect of Mobile and its Applications on Society” and “Impact of Western culture on India” for II and IV semester Students on 2/3/2016.
- One day seminar on “Current trends in Computer Science and Applications” for II and IV semester MCA students organized by MCA forum, Dept. of MCA on 24/2/2016.
- Aptitude and Programming Test conducted on 19/08/2015 organized by MCA Forum, MCA department of Master of Computer Applications, BIET, Davangere.
- One day Seminar on “Energy and Thermal Management in Computing devices” on 7th March 2015, Resource Person Praveen B.P., Principal Engineer, Samsung R&D Institute India, Bangalore. Bapuji Institute of Engineering and Technology, Davngere-577 004.
- One day Seminar on “Cloud Computing and ERP” on 17th September 2014, Resource Person Rajeev Raghunath, Founder and CEO, Kramah Software India Pvt Ltd., Banglaore, organized at Department of Master of Computer Applications, MCA Forum, Bapuji Institute of Engineering and Technology, Davngere-577 004.

Seminars/Workshops/Events Attended:

- Two Days Workshop on **Data Analytic using R-Tools** at BIET., Davangere on 30 and 31st Aug 2017
- One day Orientation Programme on “Preparation for UGC-NET and SLET Examination” in association with NSS, BIET, Davangere on 19th April 2017
- One day Workshop on “Intellectual Property Right” organized by R&D cell of BIRT., Davangere on 6th April 2017
- One day seminar on “Role of Women in Societal Reforms” on 10th March 2017 organized by Department of IS & E in association with ISTE Faculty chapter, ISTE student chapter, NSS, YRCW, BIET Davangere
- Two days Workshop on Taxonomy and Course Outcomes on 3rd& 4th Jan 2017 at VTU Regional Office, Bangalore
- One day Seminar on “Introduction to AngularJS” on 27th February 2017, Organized by MCA forum and Dept. of MCA, Bapuji Institute of Engineering and Technology
- Seminar on Open Source Intelligence – Network, Application & Security on 31st Aug 2016
- Seminar on Markov Chains and its Applications on 22nd April 2016
- One day Seminar on Java Crystals on 6th April 2016
- 3 Days International Conference on Applied and Theoretical Computing and Communication Technology(iCATccT – 2015) at BIET, Davangere during 29 – 31 Oct 2015
- Workshop on Research Methodology organized by Research & Development cell of BIET., on 28 Oct 2015

- One day workshop on Professional Application Development Using .NET Organized by MCA Forum BIET., on 21st Aug 2015
- EMC Academic Summit 2015 held at Hotel Le Royal Meridian Chennai, on 12th Feb 2015
- Two days' workshop on Women Empowerment organized by IS&E Dept., BIET., on 18th& 19th December 2014
- Two days workshop on Insights on Advanced Java with Exposure to Selenium & e-Commerce organized by MCA forum BIET., on 22nd& 23rd Aug 2014
- One Week FDP on OpenGL, NS Tools and Image Processing Technique conducted by Dept., of MCA, JNNCE Shimoga during 07th – 11th July 2014
- Four days workshop on “Training of Evaluators on Outcome Based Education and Accreditation” jointly organized by National Board of Accreditation, New Dehli on 05-03-14(Phase-I) and 21 – 23 March 2014 (Phase-II) at BIET, Davangere
- Workshop on “ Android Application Development” on 26th march 2014 organized by Department of Master of Computer Applications, BIET, Davangere
- Two days workshop on Soft-Computing in Healthcare Applications (SOFT-COMP 2014) organized by Manipal Institute of Technology, Manipal on 28th – 29th march 2014
- 3 Days FDP on Alan M. Turing-Simplification in Intelligent Computing held at PESIT, Bangalore during 18-20Dec, 2012
- Attended and presented paper in International conference on Signal Processing at IISC., Bangalore, July 2012
- Participated workshop on “ High Impact Teaching Skills “ from 28May to 1June 2012
- Winter school on Speech and Audio Processing 2012 Topic: Computational Auditory Scene Analysis at IISC Bangalore during 6-9Jan 2012
- Attended and presented paper in 5Indian Intentional Conference of Artificial Intelligence 2011
- Winter School on Speech and Audio Processing 8-11Jan 2011, IIT, Guwahati
- Attended and presented paper in 18th International conference on IWSSIP on 16-18June 2011 at Europe