

#### MAHARAJA INSTITUTE OF TECHNOLOGY THANDAVAPURA MYSURU - OOTY ROAD, JUST OFF NH 766 NANJANAGUDU TALUK, THANDAVAPURA, KARNATAKA 571302

Date: 3/2/2024

### **Faculty Profile**

Name:	Dr. Chethan H K	
Current Designation:	Professor & Dean Administration	100
Date of Current Designation	1/8/2016	
Department	Department of Studies in Computer Science and	
	Engineering	
University Faculty Reg. No	4MHCS0002310	

Qualification:

Degree	Year	College and University
Ph.D	2011	University of Mysore
MCA	2008	University of Mysore
<b>Diploma Certificate Course</b>	2005	UGC Sponsored Career Oriented Course, University of Mysore
B.Sc	2005	University of Mysore

Date of joining to the Institute: 1/8/2016

Details of Positions Occupied:

	Duration		Department
Designation	From	То	
Professor	1-08-2016	Till date	Computer Science and
			Engineering
Dean Administration	17-04-2021	Till date	College Level

Details of Publication: \*Attached Separate list

No. of papers published in National Conference:

No. of papers published in Inter-national Conference: 30

Number of International Journal:

urnal:		

12

16

Responsibilities taken in college level:

Committee	Positions	Year
ADMINISTRATION	DEAN	17-04-2021
E-WAST E	CHAIRMAN	6-04-2021
IQAC	MEMBER SECRETARY	5-04-2021
NBA	CONVENER	5-04-2021

No of student projects carried out as a guide (UG):

Project Name & Descriptions	Year
Vehicle and Pedestrian using deep learning	2024
Stress prediction in working employees using machine learning	2024

Dementia care application	2023
Smart Garbage monitoring System	2023
Pose Mate	2022
Crofting Hybrid Robot	2022
Face Forensic Manipulation detection	2021
Spammer and Fake User Id	2021

No of subjects taken for UG students:

Subject Title	Year	Semester	No. of students attended	No. of students passed	Pass percentage
Digital Image Processing	2023	7 <sup>th</sup> Sem	67	67	100
Management and Entrepreneur	2022	5 <sup>th</sup> Sem	65	65	100
Programming in C	2021	2 <sup>nd</sup> Sem	55	51	93

Personal Details:

Permanent Address: #426, Vijaynagar 3<sup>rd</sup> Stage A1 Block, Mysore.

Date of Birth: 16-08-1984 Father's name: H D Krishnappa Mother' name: H A Padma Nationality: INDIAN



# Executive Summary

PRELI	PRELIMINARY				
Sl No.	Particulars	Details			
1	Name	Dr Chethan H K			
2	Date of Birth & Age	16 <sup>th</sup> August 1984, 36 Years			
3	Present Work & Designation	Professor, Department of Studies in Computer Science and Engineering, Maharaja Institute of Technology, Thandavapura, Mysore			
4	Caste	3A			
5	Mobile	+91-9620228009			
6	E-mail	hkchethan@gmail.com chethanhk@mitmysore.in			

PROFESSIONAL EXPERIENCE					
Sl No.	Designation	University/Institution	Location	From	То
1	Dean (Administration)	Maharaja Institute of Technology, Mysore	Mysore	2021	Till date
2	Professor	Maharaja Institute of Technology, Mysore	Mysore	2016	Till date
3	Academic Head	Lions Sevaniketana Society	Mysore	2017	2018
4	Editorial Board	Lecture Notes in Network and Systems, Springer	Mysore	2016	2016
5	Professor	Maharaja Institute of Technology, Thandavapura, Mandya	Mandya	2014	2016
6	M.Tech Co-Ordinator	Maharaja Institute of Technology, Thandavapura, Mandya	Mandya	2012	2016
7	Associate Professor	Maharaja Institute of Technology, Thandavapura, Mandya	Mandya	2011	2014
8	Member , Organizing Committee	ICCR - 2011	Mysore	2011	2011
9	Lecturer	DoS in Computer Science , University of Mysore	Mysore	2008	2011
10	Placement In charge	DoS in Computer Science	Mysore	2009	2010
11	Visiting Faculty	Huanghuia University	China	2009	Till date
12	Visiting Faculty	Zheng Zhou Technological University	China	2014	Till date

EDUCATIONAL QUALIFICATION					
Sl No.	Educational Qualification	University/Institution	Year	Subject	
1	Ph.D	University of Mysore	2011	Image processing, Pattern Recognition	
2	MCA	University of Mysore	2008	Computer Science	
3	Certificate Course	UGC Sponsored Career Oriented Course , University of Mysore	2005	Information Technology	
3	B.Sc	University of Mysore	2005	Physics Computer science Mathematics	

KEY CONTRIBUTIONS: IN TEACHING					
Sl No.	Area	Key contributions.			
1	Teaching	<ul> <li>13 years of Post Graduate and Under Graduate teaching experience.</li> <li>8 years of Administration experience</li> <li>Working as an active member in several boards for curriculum design.</li> <li>Motivating and Inspiring the students to contribute to nation</li> <li>Adoption of ICT tools in teaching.</li> <li>Creating a safe and cooperative environment for students</li> </ul>			

# KEY CONTRIBUTIONS: AT UNIVERSITY LEVEL

Sl No.	Area	Key Contributions	
1	Information Communication division (ICD) at UoM	Assisted Co-Ordinator in setting up campus wide wireless networking and Setting up of centralized data centre connectivity	
2	Chinese programme, DoS in Computer Science, UoM.	Assisted Co-Ordinator in designing and successfully implementation of the following programs at University of Mysore         ➤ B.Tech (Information Technology) & (Software engineering)         ➤ MS (Information Technology) & (Software engineering)	
3	Board of Examiner at UoM	Btech (IT) Programs Internal Member	
4	Board of Examiner at UoM	Msc (IT) Programs External Member	

KEY CONTRIBUTIONS: RESEARCH AND PUBLICATIONS				
Sl No.	Area	Particulars	Remarks	
12 year	s of Research experience			
1	Ph.D Supervision	6 Students awarded Ph.D	8 under supervision	
2	M.Sc Tech (by Research )	01 students have been awarded degree		
3	Research collaborations	<ul> <li>Dr Matrix , Chinese Academy of Science, Beijing, China.</li> <li>Dr. Palaiahnakote Shivkumar, University of Malaya, Malayasia.</li> <li>Dr Zhu Hao, Huanghuai University.</li> <li>Dr. Tian Jipeng, Zhengzhouian Technical University, China</li> <li>MILES and Equambi Project by</li> <li>ERAMASU (European commission body)</li> </ul>	7. 5 Lakhs	
5	Research publications	Articles have been published in repute Journals/ conference	56	
6	Referee/reviewer	For several International Journals, conferences, symposiums and workshops	Till date	
7	Editorial Board	For several national and International Journals	Till date	
8	International Exposure	<ul> <li>Huanghuai and Wuhan University, China</li> <li>Indo- Europe MILES and Equambi Project with University of Barcelona, Spain and KTH Royal Institute Stockholm</li> </ul>	2010	
9	Participation in Seminars/Conferences	Actively participated and presented papers in seminars/conferences	Till date	
10	Research Contributions	<ol> <li>Machine Learning</li> <li>Image Processing</li> <li>Research Advances in Biometrics</li> <li>Video Processing</li> </ol>		
11	Research citation Index	Citations –1048 H-Index –15, I10-27	03/02/24	

### **Publications**

H. K. Chethan, G. Hemantha Kumar, R. Raghavendra "Texture Based Approach for Cloud Classification Using SVM" in ARTCom 2009, International Conference on Advances in Recent Technologies in Communication and Computing, Kerala, India, 27-28 October 2009. pp 688-690, published by IEEE Computer Society, 2009.

H.K.Chethan and G.Hemantha Kumar., "A Novel Edge Based Method to Extract Text in Camera Captured Images "in ACT -2009 published by IEEE, Volume 1, 2010, pp 853 -855,ACEEE, India.

H.K.Chethan and G.Hemantha Kumar., "Obliterable of Graphics and Correction of Skew using Hough Transform for Mobile captured Documents". "ICGIP -2010 published by IEEE, Volume 1, 2010, pp 127-132 Manila, Philippines.

H.K.Chethan and G.Hemantha Kumar., "Image Dewarping and Text Extraction for Mobile Captured Distinct documents". "ICEBT -2010, LNCS, Elsevier Procedia Computer Science, Volume 2, 2010, pp 330-337, India.

H.K.Chethan and G.Hemantha Kumar., "A Comparative analysis of different edge based algorithms for mobile/camera captured images" Journal published in International Journal of Computer Applications (IJCA) (0975 – 8887), Volume 5-No.4, pp 36- 39, August 2010.

H.K.Chethan and G.Hemantha Kumar., "Graphics separation and skew correction for mobile captured documents and comparative analysis with existing methods" Journal published in International Journal of Computer Applications (IJCA) (0975 – 8887) Volume 7– No.3, pp 42-49, September 2010.

H.K.Chethan and G.Hemantha Kumar., "Data Quality Issue and Skew Correction for Mobile captured complex documents" Journal accepted to be published in International Journal of Computer Applications (IJCEIT), Volume 3, pp 144-152, November 2010.

H.K.Chethan and G.Hemantha Kumar., "Text Recognition and Comparison of Edge Based Method for Mobile Captured Complex Documents" Journal accepted to be published in International Journal of Computer Applications (IJEEE) Volume 3, pp 108-116, December 2010.

H.K.Chethan and G.Hemantha Kumar., "Dewarping curved Documents and removing Distortions due to Page Curl in Camera Based Images" at AMCM 2011, Volume 1, 2011, pp 204-210, published by Ikon ,ISBN-978-81-908497-6-0 ,Tirupati, Andhra Pradesh.

Tian Jipeng, G Hemantha Kumar and H.K.Chethan., "Chinese Numeral recognition using Gabor and SVM" ICETET -2011 3rd International Conferences on Emerging Trends in Engineering and Technology, Issue Date: 19-21 Nov. 2010, pp 202 - 206 published by IEEE, Goa, India.

H.K.Chethan and G.Hemantha Kumar., "Illumination Reduction for Camera Captured Documents using Block processing and Homomorphic Filtering Technique". "CSNT-2011 published by IEEE and MIR Labs, Katra, Jammu, India.

Tian Jipeng, G Hemantha Kumar and H.K.Chethan., "Offline Chinese Character Recognition Using Elastic Matching and Parallel Implementation ". "ICINT-2011 published by IEEE, Chennai, India.

Tian Jipeng, G. Hemantha Kumar and H.K. Chethan, "Offline Chinese Character Recognition Using Elastic Matching and Parallel Implementation", International Conference on Information and Network Technology, IPCSIT vol.4, pp34-38, 2011, IACSIT Press, Singapore, Support by ISTP.0.<u>ew</u>

Tian Jipeng, G Hemantha Kumar and H.K.Chethan., "Skew Correction for Chinese Character using Hough Transform" International Journal of Computer Applications 22(2):33–36, 2011. Published by Foundation of Computer Science.

Tian Jipeng, G. Hemantha Kumar and H.K. Chethan, "Skew correction for Chinese character using Hough transform", (IJACSA) International Journal of Advanced Computer Science and Applications, Special Issue on Image Processing and Analysis, pp45-48,May,2011.

H.K.Chethan and G.Hemantha Kumar., "A Survey - Camera Based Document Analysis". Document Recognition and Understanding, INTECH Publishers, Volume 2, 2011, ISBN 978-953-307-320-0, Austria

G. Hemantha Kumar and Tian Jipeng, H.K. Chethan "Different Edge Detection Algorithms Comparison and Analysis on Handwritten Chinese Character Recognition",

International Journal of Computer Applications(IJCA) (0975 – 888), Volume 47– No.17, pp20-23, June 2012

Shwetha R , Dr. Chethan H K, Automatic and Manual Controlled Alive Human Detection Robot During Disaster Management. International Journal for Technological Research In Engineering Volume 1, Issue 11, July-2014, ISSN (Online): 2347 – 4718

Rekha A , Dr. Chethan H K. Automated Attendance System Using Face Recognition Through Video Surveillance, International Journal For Technological Research In Engineering . Volume 1, Issue 11, July-2014 ISSN (Online): 2347 - 4718

Sowmya Shree K.S, Chethan H.K, Sharath Kumar Y. Motion Detection for Real Time Surveillance, IJRET: International Journal of Research in Engineering and Technology eISSN: 2319-1163 | pISSN: 2321-7308, Volume: 03 Issue: 01 | MAY-2015.

Mahesha D M, Chethan H K, Gopalan N P. K-means Clustering for Document Analysis in Indian Bilingual Documents. Volume 5, Issue 12, December 2015 ISSN: 2277 128X International Journal of Advanced Research in Computer Science and Software Engineering.

Hamsaveni, Pradeep C, Chethan H K. Script Identification in Printed Indian Documents. International Journal of Advanced Research in Computer Science and Software Engineering Volume 5, Issue 12, December 2015 ISSN: 2277 128X Research Paper © 2015, IJARCSSE

Sriraksha, Chethan H K , Sharath kumar Y.H. Identification And Classification of Fruit Diseases. Recent Advances in Computing, Informatics, Communication and applications NCRACICA-2015 organized by GSSS, Mysore.

Hamsaveni, Pradeep, Chethan H K, Dimension Reduction for Script Classification-Printed Indian Documents. International Journal of Advanced Information Technology (IJAIT) Vol. 7, No.1/2/3, June 2017 DOI: 10.5121/ijait.2017.7301

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C. Sunil, H. K. Chethan, Raghunandan K. S, G. Hemantha Kumar: A Deep Convolution Neural Network Based Model for Enhancing Text Video Frames for Detection. Intelligent Systems Design and Applications - 17th International Conference on Intelligent Systems Design and Applications (ISDA 2017) Published by Springer : 430-441, doi.org/10.1007/978-3-319-76348-4\_42.

C. Sunil, K. S. Raghunandan, H. K. Chethan, G. Hemantha Kumar: Symbolic Approach for Word-Level Script Classification in Video Frames. Recent Trends in Image Processing and Pattern Recognition, Second International Conference, {RTIP2R} 2018 RTIP2R (3) 2018: 72-84, doi.org/10.1007/978-981-13-9187-3 \_7 Published by Springer.

Zhu Hao, H K Chethan: The Various Levels of Fusion for Face and Palmprint. International Journal of Latest Transactions Engineering and Sciences, Vol 8, Issue 3 pp. 14-18, 2019.

Zhu Hao, H K Chethan: Multimodal Biometric Features for Authentication. International Journal of Latest Trends in Engineering and Technology, Vol 15, Issue 2 pp. 67-69, 2019.

Zhu Hao, H K Chethan: Local Fusion Visual Features and Variational Bayesian Extreme Learning Machine for face and Fingerprint Recognition. International Journal of Computer Applications, (IJCA), 2020.

Shreyas Rangappa, Naveena C, H K Chethan, K S Ragunnandan, Sunil C.Convolution Neural Network Based Deep Feature Fusion for Palmprint and Handvein ,International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-9 Issue-1, October 2019.

C. Sunil, H. K. Chethan, Raghunandan K. S, G. Hemantha Kumar: Symbolic Approach for Word-Level Script Classification in Video Frames, RTIP2R, Springer 2019.

C. Sunil, H. K. Chethan, Raghunandan K S, G. Hemantha Kumar:Deep Features based Multilingual Text Detection and Recognition in Video Frames. International Journal of Recent Technology and engineering, IJRTE, Elsevier, Vol 8, Issue 4, 2019.

C Sunil, H K Chethan, Raghunandan K S, G Hemantha Kumar: Multilingual-Word-Script Classification in Text Video Frames. International Journal of Computer Science and Engineering, IJCSE, Vol. 7, Issue 12, 2019.

Ranjit K N, C, Naveen , K S, Raghunandan , Chethan, H. & C, Sunil. (2019). Deep Features Based Approach for Fruit Disease Detection and Classification. International Journal of Computer Sciences and Engineering. Vol 7, pp 810-817. 2019

Ranjit K N, Raghunandan K S, Naveena C, Chethan H K, Sunil C: A Symbolic Representation and Classification of Fruits, International Journal of Computing and Digital Systems, Volume 8, no 4, pp 1-12. 2019.

Ranjit K N, Naveena C, Chethan H K: Fruit Disease Classification based on Texture Features, International Journal of Computer Applications, Vol 178, pp. 11-15, 2019.

Ranjit K N, Naveena C, Chethan H K: Fruit Disease Categorization based on Color, Texture and Shape Features, International Journal of Computer Applications, Vol 10, Issue 4, pp 56-60, 2019.

Dheemanth Urs R & Chethan H K , A Study on Identification and Cleaning of Struck out words in Handwritten Documents, International Conference on Data Intelligence and Cognitive Informatics (ICDICI-2020)

Feature and Decision Level Fusion in Children Multimodal Biometrics, International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8 Issue-5, January 2020.

Raghunandan K S, Sunil C, Ranjit K N, H K Chethan, Classification of Leaves based on Fusion Features, Journal of Engineering Sciences, Vol 11, Issue 5, May/ 2020 , ISSN NO: 0377-9254

Bhavya & Chethan H K , Abrupt shot change detection using midhinge local binary pattern, IEEE International Conference on Engineering in 4th Industrial revolution 2020 (Accepted)

Ranjit K N, Naveen C. & Chethan H. K.,Fruit Disease Classification based on Texture Features, International Journal of Computer Applications (0975 – 8887) Volume 178 – No. 49, September 2019

Raghunandan K S, Sunil C , Ranjit K N , H K Chethan, Deep Features Based Approach for Logo Classification, Compliance Engineering Journal, ISSN NO: 0898-3577, Volume 11, Issue 6, 2020 , Pp 14-20

Zhu Hao, Raghunandan K S , Sunil C , H K Chethan, Convolution Neural Networks for Multimodal Biometric Identification, Journal of Engineering Sciences , Vol 11, Issue 6, June/ 2020, ISSN NO: 0377-9254

Ranjit K N, Raghunandan K S, Sunil C , H K Chethan , Deep Neural Network Based Classification of Fruit Images, Compliance Engineering Journal, ISSN NO: 0898-3577 Page No:320-326.