

# Dr. C.Ramesh Kumar Reddy

**Professor & Head** 

**Education Qualifications: Specialization:** 

Doctor of Philosophy (Computer Science) Software Engineering



## ADDRESS:

• D – Block -Room No 104

## JNTUH ID:

1336-170911-162939

#### EMAIL:

hodcse@mgit.ac.in, crkreddy\_cse@mgit.ac.in

# DATE OF JOINING: 01-08-2017

## **EXPERIENCE - 32 Years**

- Teaching 26
- Research -13
- Industry -6

#### SUMMARY:

- Publications 38
- Conferences 28
- Patents 5

#### **EVENTS:**

- Organized 12
- Attended 09

# **Membership of Professional Bodies:**

1. CS

#### **Responsibilities Held at Institution Level:**

1. HoD & Professor

#### **Responsibilities Held at Department Level:**

1. HoD & Professor

#### **Research Guidance:**

- 1. Two students were awarded Ph. D.
- 2. Fours students are pursuing Ph.D.

# Courses Handled at Under Graduate /Post Graduate Level:

- UG: Compiler Design, Formal Languages and Automata Theory Artificial Intelligence, Design and Analysis of Algorithms, Neural Networks,
- **PG:** Advanced Data Structures

#### **Publications:**

- 1. Dr. C R K Reddy, LR Raju, A Key Exchange Approach for Proficient and Secure Routing in Mobile Adhoc Networks, International Journal of Interactive Mobile Technologies.- ISSN: 1865-7923 Vol. 11 Issue 4, p43-54.
- 2. Dr. C R K Reddy, LR Raju, Quality of Services (QoS) and Security Issues in Mobile Ad Hoc Networks (MANETs) A Review, WWJMRD, e-ISSN: 2454-6615, 2017; 3(11): P198-202.
- **3.** Dr. C R K Reddy, LR Raju, <u>A</u> Survey on Routing Protocols and QoS in Mobile Ad Hoc Networks (MANETs)-Indian Journal of Science and Technology, Vol 10(8), DOI: 10.17485/ijst/2017/v10i8/106593, February 2017, ISSN (Print): 0974-6846, p1-8.
- **4.** Dr. C R K Reddy ,E Padmalatha and Padmaja B Rani, Classification of Concept-Drifting Data Streams using Optimized Genetic Algorithm, International Journal of Computer Applications 125(15):1-6, September 2015.
- **5.** Dr.C.R.K.Reddy, E.Padmalatha and Padmaja Rani, Mining Concept Drift from Data Streams by Unsupervised Learning, International Journal of Computer Applications 117(15):35-34, May 2015.
- **6.** CRK Reddy etal., "Weighted Coupling Support(WCS)- A Metric to Predict the fault proneness of ObjectOriented Application", IJARCS(ISSN 0976-5697) Aug. 2014, pp. 1-5.
- 7. Amjan.Shaik, Dr.C.R.K.Reddy and Dr.A.Damodaram, "Scalability and Sensitivity of WCS,WChS over the traditional Coupling and Cohesion Metrics: An Empirical Analysis", International Journal of Advanced Research in Computer Science and Software Engineering (IJARCSSE), Volume 3, Issue 6, June 2013, ISSN:2277-128X5, Impact Factor: 2.080.
- **8.** Amjan.Shaik, Dr.C.R.K.Reddy and Dr.A.Damodaram, "Impact of mediated relations as confounding factor on cohesion and coupling metrics: For measuring fault proneness in OO software quality assessment", Global Journal of Computer Science and Technology (GJCST), Volume 12, Issue 13, September 2012, ISSN:0975-4172.



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- **9.** Amjan.Shaik, Dr.C.R.K.Reddy and Dr.A.Damodaram, "Weighted Cohesion Support (WChS): A Metric to predict the fault proneness of Object Oriented Application", International Journal of Scientific and Engineering Research (IJSER), Volume 3, Issue 10, October 2012, ISSN:2229-5518,Impact Factor: 1.4.
- **10.** Amjan.Shaik, Dr.C.R.K.Reddy and Dr.A.Damodaram, "Weighted Coupling Support(WCS): A Metric to predict the fault proneness of Object Oriented Application", International Journal of Advanced Research in Computer Science (IJARCS), Volume 3, Number 4, July-August 2012, ISSN:0976-5697, ICV:5.47.
- 11. Amjan.Shaik, Dr.C.R.K.Reddy and Dr.A.Damodaram, "Object Oriented Software Metrics and Quality Assessment: Current State of the Art", International Journal of Computer Applications (IJCA), Volume 37, Number 11, January 2012, ISSN:0975-8887, Impact Factor: 0.835.
- 12. Amjan.Shaik and Dr.C.R.K.Reddy, "An Empirical Validation of Object Oriented Design Metrics in Object Oriented Systems", International Journal of Emerging Trends in Engineering and Applied Sciences (JETEAS), Volume 1, Number 2, Page.No:211-219, ISSN: 2141-7016, December 2010, Impact Factor: 3.6
- **13.** Amjan.Shaik and Dr.C.R.K.Reddy, "Metrics for Object Oriented Design Software Systems: A Survey", International Journal of Emerging Trends in Engineering and Applied Sciences (JETEAS), Volume 1, Number 2, Page.No:189-197, ISSN: 2141-7016, December 2010, Impact Factor: 3.6.
- 14. Dr.C.R.K.Reddy, Dr.A.Damodaram, "STATISTICAL ANALYSIS FOR OBJECT ORIENTED DESIGN SOFTWARE METRICS", International Journal of Engineering Science and Technology(IJEST), Volume 2, May 2010, Page 1136-1142.
- **15.** C. R. K. Reddy, BalaManda, "Empirically Investigating the Effect Of Design Metrics On Fault Proneness in Object Oriented Systems" International Journal of Computer Science & Engineering Technology 2010 (IJCSET), ISSN: 2229-3345, Vol. 2 No. 4
- **16.** G.Anil Kumar, Dr.CRK.Reddy, Dr.A.Govardhan "Software Code Clone Detection using AST", International Journal of P2P Network Trends & Technology, Volume 9 June 2014 pp 33-39
- 17. G.Anil Kumar, Dr.CRK.Reddy, Dr.A.Govardhan "Influences of code cloning in software maintenance cost", International Journal of Advanced Trends in Computer Science and Engineering, Vol.2, No.1, Pages: 640 643 (2013)
- **18.** G.Anil Kumar, Dr.CRK.Reddy, Dr.A.Govardhan, "Code duplication in Software Systems: A survey", International Journal of Software Engineering Research & Practices Vol.2, Issue 1, Jan 2012, pp1-6.
- **19.** G.Anil Kumar, Dr.CRK.Reddy, Dr.A.Govardhan "An Efficient Method-Level Code Clone Detection Scheme Through Textual Analysis Using Metrics", International Journal of Computer Engineering & Technology, volume 3, issue 1-2012, pp 273-288, Chennai, India.
- **20.** G.Anil Kumar, Dr.CRK.Reddy, Dr.A.Govardhan "code clone detection with refactoring support through textual analysis", International Journal of Computer Trends and Technology-Volume2 Issue2- 2011, pp.147-150.
- 21. E Padmalatha, C R K Reddy and Padmaja B Rani. Article: Ensemble Classification for Drifting Concept. International Journal of Computer Applications 80(11):33-36, October 2013. Published by Foundation of Computer Science, New York.
  22. C.R.K.Reddy et.al.,".," Conditional Functional oDependencies in Data
- **22.** C.R.K.Reddy et.al.,".," Conditional Functional ODependencies in Data Cleaning", IFRSA International Journal of Data Warehousing & Mining, Vol 2, Issue1 Feb 2012.
- **23.** M. Swamy Das, CRK Reddy, D Sandhya Rani, A Govardhan "Script identification from Multilingual Telugu, Hindi and English Text Documents", International Journal of Wisdom Computing (IJWBC), Volume1(3), Dec 2011, pp 79-85
- **24.** M Swamy Das, CRK Reddy, A Govardhan, HimaBindu "Evaluation of Text Detection and Localization Methods in Natural Images" IJETAE, Volume 2., Issue 6., June 2012, pp 277-282.



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#### **EVENTS:**

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- **25.** M Swamy Das , Dr. CRK Reddy, Dr. A Govardhan, K Rahul "Multilingual Optical Character Recognition System for Printed English and Telugu Base Characters", International Journal of Science and Advanced Technology (IJSAT)(ISSN 2221-8386), Volume 1 No.4 June 2011, PP 106 111
- **26.** M Swamy Das, G Sai Krishna, Dr. A Govardhan, Dr. CRK Reddy. "Segmentation of Overlapping Text lines, characters in Printed Telugu Text Document Images", International Journal of Science and Technology(IJEST) Vol 2(11), 2010, PP 6606-6610, ISSN: 0975-546.
- **27.** D. Jayaram, CRK Reddy et al. "An Overview of Optical Character Recognition Systems Research on Telugu Language", IJSAT (ISSN 2221-8386), Vol(2) No.(9) Sep. 2012. pp 23-29.
- 28. Security Improvisation through Node Trust Prediction Approach in Mobile Ad Hoc Networks" in International Journal of Interactive Mobile Technologies(iJIM), iJIM- Vol. 13, No. 9, September 2019 pp. 40-51, ISSN: 1865-7923, DOI: https://doi.org/10.3991, /ijim.v13i09.9329, Indexed by DBLP & SCOPUS.
- 29. "Node Activity Based Trust and Reputation Estimation Approach for Secure and QoS Routing in MANET" in International Journal of Electrical and Computer Engineering (IJECE), Vol. 9, No. 6, December 2019, pp. 5340-5350, ISSN: 2088-8708, DOI: 10.11591/ijece.v9i6.,SCOPUS Indexed.
- 30. Quality of Service Aware Data Dissemination and Resource Management in Internet of Vehicle using Fog and Cloud Computing, The Mattingly Publishing Co., Inc., January February 2020, Page No. 13073 13083.ISSN: 0193 4120.
- 31. Movable Road Divider Using Internet of Things, 2020, IJCSE, Vol.-8, Issue-2, Feb 2020, YesE-ISSN: 2347-2693.
- **32.** Text Extraction from Hoardings by Hybrid Model, IJEAT, Volume-9, Issue-4, April 2020, Page No. 73-80. ISSN:2249-8958 (online).
- **33.** Three Level Gateway protocol for secure M-Commerce Transactions, Solid State Technology, Vol. 63 No. 6 (2020), ISSN: 0038-111x
- **34.** CODE2VEC Based Cognitive Agent System to Retrieve Relevant, E3S Web Conf., Volume 184, 2020, 2nd International Conference on Design and Manufacturing Aspects for Sustainable Energy (ICMED 2020), DOI: <a href="https://doi.org/10.1051/e3sconf/202018401064">https://doi.org/10.1051/e3sconf/202018401064</a>, Published online 19 August 2020
- **35.** Software Defect Prediction using Machine Learning Algorithms: Current State of the Art, Solid State Technology Volume: 64 Issue: 2,Publication Year: 2021, ISSN: 0038-111X
- **36.** A Comprehensive Study of Clustering Algorithms in Data Stream, International Journal of Engineering Research & Technology (IJERT), ISSN: 2278-0181,Vol. 9 Issue 10, October-2020
- **37.** An Analysis of the Rising Concerns of an Insider Threat for Sustainable IT Development, Journal of Green Engineering, Pages: 6595–6612,ISSN: 1904-4720 (Print).
- 38. Serverless Through Cloud Native Architecture, International Journal Of Engineering Research & Technology (IJERT), Volume 10, Issue 02 (February).

## **Conferences:**

- Concept Drift In Data Streams with Decision trees, ICCEE-2016, McGraw Hill Proceedings
- Significance of imbalanced Data in Classification, ICRAESIT 2015, 978-93-85100-56-7
- 3. A Survey on different trends in Data Streams, ICNIT-2015, 978-1-4244-7577-3
- 4. Efficient Classifier over Stream Sliding Window using Associative Classification approach,Vol.:115, No.22,PP.1-8,DMIN15 0975-8887, IJCA
- 5. Fast Rule-based Prediction of Data Streams using Associative Classification Mining, ICITCS-15 IEEE Conf. Proceedings978-1-4673-6357-8/15
- 6. Fast Rule-based Heart Disease Prediction using Associative Classification Mining, ICCCC-15, IEEE Proceedings



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- 7. Efficient Learning Approaches for Agents in Data Mining, ICTCS-2014 (ACM),ISBN: 978-1-4503-3216-3
- 8. Classification of concept drift data streams,ICISA-2014, ISBN:978-978-1-4799-444-9
- 9. Neural Based Telugu Optical Character Recognition System using Diagonal Features, NCRTIT-13, Elsevier, March'13, ISBN 978-93-5107-051-1
- 10. Heuristic based script identification from multilingual text documents(PP.37-42),RAIT-12, ISM Dhanbad,IEEE Xplore,DOI:10.1109/RAIT.2012.6194 627
- 11. Neural Based Multilingual Optical Character Recognition System (MOCR) NOV,2011, pp CET-2011, WC on E&T, Shanghai, 978-1-61284-365-0/11.
- 12. Impact of Transitivity as Confounding Factor for Coupling and Cohesion Metrics in Object Oriented Systems RAAME-2012 VNRVJIT.
- 13. Statistical Analysis Approaches to Measuring Coupling and Cohesion to Estimate the fault proneness in Object OrientedSystems RAAME-2012 VNR VJIT.
- Clone Detection using Textual and Metric Analysis in Java ICRAMAV-12 978-81-7800-281-1
- 15. Statistical Analysis for Object Oriented Design Software Metrics ICAIEA 2010 Anna University
- 16. A Taxonomy of Software Design Patterns NCRTMS-2010 Osmania University.
- 17. A Survey of Process Development Models NCACT-2010 BIETS, HYD.
- 18. Exact Match Image Retrieval System Using Spatial Database MMET-2010 Stanley CET, HYD.
- 19. A Survey on Different Trends in Data Streams ICNIT-2010 978-1-4244-7577-3.
- 20. Metrics Do They Really Help? Validation of Software Metrics Using AS Metric Tool NCFCA-2009 NIT, Pune.
- 21. An Empirical Validation of Object Oriented Metrics For Fault Predication In Software Process NCSE-2009, MSRIT, IEEE, Bangalore ISBN:81 8884964-2.
- 22. Efficient Learning Approaches for Agents in Data Mining of Real Time Data Streams IEEE- CITAFD- IIT Kanpur Proceedings.
- 23. Software Quality Architecture Based On Runtime Metrics RESPOGRAF-2008 ASTRA.
- 24. Empirical Analysis of Metrics for Object- Oriented Design complexity ICSPOCA, Dept. of Statistics, Andhra University Proceedings.
- 25. Object Oriented Design Metrics: A Survey and Comparison SVPEC, Visakhapatnam Proceedings.
- 26. Analysis on Software Quality Improvement by using Data Mining Techniques & Object Design Software NCMTCST -2013, Hyderabad Proceedings.
- 27. Customer Relationship Management : A New Trend In E-Business NCMTCST -2013, Hyderabad Proceedings.
- 28. A Study of Real time Process Models In Software Engineering NCACT-2010, Hyderabad Proceedings"

## **Patents:**

- 1. Patent on "Real Time Multi Class Cardio Arrhythmia Classification, Based On Dnn Implemented In The Iot Cloud Platform" was published on 09-03-2021 Patent Number is 202141038591A
- 2. Patent on "Smart Agriculture Using Sensors in Internet of Things (IOT) "was published on 1-10-2021 Patent Number is 202141042980
- 3. Patent on" Image Processing Technique for surface crack detection in buildings "was published on 24-9-2021Patent Number is 202141036294A
- 4. Patent on "Detection Of Nutrients In Soil Using Iot" was published on July-2020Patent Number is 202041028934A
- 5. Patent on "IAEC- SYSTEM: IIntelligent Iot System For Agriculture Environment Control" was published on March-2020 Patent Number is202041010147A



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#### **Research & Consultancy:**

- 1. Rs.8,00,000/- as ISOMDB by AICTE for the period 2000-2003.
- **2.** Rs.8,40,000/- as Recurring grant in aid under AICTE-Prerana Scheme for the period 2019-20
- 3. Rs.7,64,706/- Total Grant in AID Sanctioned by AICTE for the year 2019-20

# No. of Books/Chapter Published with details:

1. Book Chapters in "Perspectives of IOT and its Application", Publisher "Archers and Elevators Publishing House", First Edition 2021, Chapters: 4,7,13.

## **Events Organized:**

#### FDPs/STTPs:

- One week FDP on "Machine Learning using Python"
- 2. One week FDP on Human Values & Professional Ethics

## Refresher Courses/ Workshops/ Webinars/ Seminars/ Guest Lecture:

- 1. 15 days industry-oriented summer camp in association with Swecha-2013
- 2. National Workshop on Relevance of Vedic Mathematics to Real World Computing.
- 3. Two-day Workshop on IoT and Web Designing
- 4. Artificial Intelligence and Machine learning algorithms in Edge Computing and applications to IoT
- 5. JHUB Hackathon on CYBER SECURITY
- 6. National Seminar on IoT FOR REAL WORLD
- 7. Special Guest Lecture On 'Zero to Maker: Free tools to Explore'
- 8. Introduction to Networks-V6
- 9. Programming through C++
- 10. Faculty Development Programe on Roll of Machine learning and Data Sciences in AI

### **Events Attended:**

#### FDPs/STTPs:

- 1. Induction Program on "Human Values and Professional Ethics",2Weeks,IIIT, Hyderabad.
- 2. One Week FDP on NBA Orientation conducted by ESCI Hyderabad.
- 3. Two weeks MSIT Mentor Training Program conducted by APSCH in collaboration with CMU
- 4. Three weeks 30th Orientation Course conducted by Academic Staff College, UoH
- 5. One week progrgam on IBM Rational Rose by IBM
- 6. One week prgoram on Outcome based Education Training and Assessment Program, CBIT, Hyd, TEQUIP
- 7. NPTEL Special lecture series "What is a Computer Science Engineering"
- 8. NPTEL Special lecture series "Simplifying Brain"
- 9. One Week Faculty Development Programme on Digital Teaching Techniques.

## Refresher Courses/ Workshops/ Webinars/ Seminars/Guest Lecture:

- 1. Guest lecture on Role of ML in Image Processing in FDP at CBIT.
- 2. NBA coordinator



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## **Online Certifications:**

- 1. NPTEL Cyber Security
- 2. Compiler Design
- 3. NPTEL Course on AI.

# **Any Other Contribution:**

- 1. Certified Yoga trainer
- 2. UHPE-Universal Human values and Professional Ethics, Instructor.
- 3. Seven Students awarded PhD.