

**JNTUA COLLEGE OF ENGINEERING (Autonomous), Ananthapuramu**  
**Department of Computer Science and Engineering**  
**Self-Assessment Report (SAR)**  
**(2016-17 to Till date)**

**1. Personal Details**

- a. Name of the faculty : Dr. A. Ananda Rao
- b. Father Name : (Late) Sri. A. Ranganna
- c. Mother Name : (Late) Smt. J. Janakamma
- d. Gender : Male
- e. Date of Birth : 1<sup>st</sup> May,1966
- f. Category (OC/BC/SC/ST) : SC  
(Mention sub category)
- g. Joining Date : April 2006- Till Date
- h. Current Designation : Professor, Dept of CSE.
- i. Aadhaar No :
- j. PAN No :
- k. Residential Address : 28-4-787 plot no 32  
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**2. Qualifications:**

Course	Name of the Institution studied	Name of the University	Year of graduation	% of marks obtained	Division
Ph.D	Indian Institute of Technology Madras	Chennai	2006		Software Engineering
M.Tech	University of Hyderabad	JNTUH	1992		Artificial Intelligence
B.Tech	University of Hyderabad	JNTUH	1989		Computer Science and

					Engineering
B.Sc	Silver Jubilee Govt.Degree College		1986		M.P.C

### 3. Experience:

Organization	Designation	Duration of Employment		Duration	Nature of Duties
		From	To		
Rayalaseema University	Vice Chancellor	27 <sup>th</sup> Nov., 2020	Till Date		•
Jawaharlal Nehru Technological University Anantapur, Ananthapuramu	Vice Chancellor i/c	9 <sup>th</sup> Dec., 2020	19th Jan., 2021	41 days	<ul style="list-style-type: none"> <li>• Provide <b>leadership</b>, academic and administrative to the whole University</li> <li>• Carry out certain important ceremonial and civic duties</li> <li>• Secure a financial base sufficient to allow the delivery of the University's mission, aims and objectives</li> </ul>
Research & Development Jawaharlal Nehru Technological University Anantapur, Ananthapuramu	Director	2018	26 <sup>th</sup> Nov. 2020	3 years	
Academic & Planning Jawaharlal Nehru Technological University Anantapur, Ananthapuramu	Director	2015	2018	4 years	
IR&P, SCDE Jawaharlal Nehru Technological	Director	2012	2015	4 years	

University Anantapur, Anantapuramu					
JNTUA College of Engg., Ananthapuramu (Andhra Pradesh)	Principal	2010	2012	2 years	
JNTUA College of Engg., Ananthapuramu (Andhra Pradesh)	Vice Principal	2008	2010	2 years	
JNTUA College of Engg., Ananthapuramu (Andhra Pradesh)	Head of the Department Computer Science & Engineering	2005	2010	5 years	

#### 4. Patents and research projects

##### a. Sponsored Research:

Sl.No	Name / purpose of the project	Sanctioned form DST/UGC/AICTE	Total Sanctioned amount	Status of the project	Total amount spent	Total amount left over	Utilization Certificate (if any)
1	RPS Project	AICTE	4,00,235/-				

##### b. Consultancy:

Sl.No	Name / purpose of the project	Sanctioned form DST/UGC/AICTE	Total Sanctioned amount	Status of the project	Total amount spent	Total amount left over	Utilization Certificate (if any)

##### c. Patents :

1. An **Indian patent** published with the title of invention “A Hybrid Approach to find initial cluster center for Clustering Single-variable data”, Application No. 3895/CHE/2014, Journal No. 22/2015, publication date. 29/05/2015. Application No. 201721015124, Journal No. 29/2017, publication date. 21/07/2017.
2. An **Indian patent** published with the title of invention “Unsupervised Data-Driven Pronunciation Adaptation Model for Automatic Speech Recognition Systems”, Application No. 201741001888 a, Journal No. 13/2017, publication date. 31/03/2017.
3. An **Indian patent** published with the title of invention “System and Method of Securing Multi-Tenant Cloud Infrastructure against Cache Based Side Channel Attack”, Application No. 201721015124, Journal No. 29/2017, and publication date. 21/07/2017.
4. An **Indian Patent** published with the title of invention “Multicore System for Reprocessing of Tasks”, Application No. 201841009115, Journal No. 11/2018, publication date 16/03/2018.

## 5. List of publications: (NC/IC/NJ/IJ)

### a. International/ National Journals

International Journals	:	85
National Journals	:	1

### International Journals:

#### 2000-2001

1. A. *Ananda Rao et.al.*, “An approach for Pattern Oriented Software Development Based on a Design Handbook”, Annals of Software Engineering, Vol. 10, 2000, pp. 329-358.

#### 2007-2008

1. A. *Ananda Rao et al.*, “Detecting Bad Smells in Object Oriented Design Using Design Change Propagation Probability Matrix”, IMECS-IAENG Lecture Notes in Engineering and Computer Science, Hong Kong, pp. 1001-1007 (Later Published in the Journal, Lecture Notes in Engineering and Computer Science, Year: 2008, Vol: 2168 Issue: 1 Pages/record No. : 1001-1007).

#### 2009-2010

1. *Ananda Rao et.al*, “Dependency Oriented Complexity Metrics to Detect Rippling Related Design Defects”, ACM SIGSOFT Software Engineering Notes, Vol. 34, Issue 4, July 2009.
2. *Ananda Rao et.al*, “An Approach to test case Design for cost effective Software Testing”, IMECS-IAENG-2009. Lecture Notes in Engineering and Computer Science, International Journal, Year: 2009, Vol: 2174 Issue: 1 Pages/record No.: 1044-1050.
3. *Ananda Rao et.al*, “A Framework for Visualizing Model-Driven Software Evolution and Its Application”, IJCSI International Journal of Computer Science Issues, Vol. 7, Issue 1, No. 3, January 2010 ISSN (Online): 1694-0784 ISSN (Print): 1694-0814 pp 47-53.

#### **2010-2011**

1. *Ananda Rao et.al*, "A Framework for Visualizing Model-Driven Software Evolution- Its Evaluation", International Journal of Software Engineering and Its Applications Vol. 5 No. 2, April, 2011.
2. *A. Ananda Rao et.al*, "An Approach to Software Testing Cost Estimation in Black-Box Environment", IJEECS International Journal of Electrical, Electronics and Computer Systems, April 2011.
3. *A. Ananda Rao et.al*, "An Approach to Cost Effective Regression Testing in Black-Box Testing Environment", IJCSI International Journal of Computer Science Issues, Vol. 8, Issue 3, May 2011.

#### **2011-2012**

1. *Ananda Rao et.al*, “Identifying Clusters of Concepts in a Low Cohesive Class for Extract Class Refactoring Using Metrics Supplemented Agglomerative Clustering Technique” in IJCSI International Journal of Computer Science Issues, Vol. 8, Issue 5, September 2011, pp 185-194.
2. *A. Ananda Rao et.al*, “Clustering and cluster based routing protocol for Delay tolerant mobile networks”, paper published in IJART International Journal of Advanced Research in Technology vol.1, Issue 1, 2011, pp 1-6.
3. *A. Ananda Rao et.al*, “Comparative Analysis of Distributed Web Server System Load Balancing Algorithms Using Qualitative Parameters” *VSRD* International Journal (IJCSIT), October 2011.(Online: ISSN 2231- 2471).
4. *A. Ananda Rao et.al*, “Extension of Direct Search Methods to Find Optimal Cluster Centroid for Constrained Multi-Variable Functions”, Fourth International Joint Journal Conference in Engineering – IJJCE 2012 (IJRTET July Issue) - Published by ACEEE, USA.

5. **A. Ananda Rao et.al.**, “Four Layered Approach to Non-Functional Requirements Analysis” in IJCSI International Journal of Computer Science Issues, Vol. 8, Issue 6, November 2011, pp 371-379.
6. **A. Ananda Rao et.al.**, “An Implementation of BOTNET Detection Algorithm for Grid”, International Journal Communication & Network Security (IJCNS), Volume-I, Issue-II, 2011, Bhubaneswar. (ISSN No: 2231 – 1882).

## **2012-2013**

1. **A. Ananda Rao et.al.**, “Address Dependability of SOA Life Cycle and Making Web Services Fault tolerant”, International Journal of Information & Computation Technology, Vol-2, 2012, pp 383-386.
2. **A. Ananda Rao et.al.**, “PAB: Protocol Anomaly Detection Using Character Distribution against buffer overflow code injection attacks” International Journal of Advanced Computing, Volume 5, Issue 1 May 2013, pp. 16-25.
3. **A. Ananda Rao et.al.**, “HTCPM: A Hybrid Test Case Prioritization Model for Web and GUI Applications”, International Journal of Information & Computation Technology, Vol-2, 2012, pp 93-96.
4. **A. Ananda Rao et.al.**, “Improving Performance and Scalability of Two Sided Markets in SoS”, International Journal of Information & Computation Technology, Vol-2, 2012, pp 155-158.
5. **A. Ananda Rao et.al.**, “Change Requests Artifacts to Assess Impact on Structural Design of SDLC Phases”, International Journal of Computer Applications, Volume 54 - Number 18, 2012.
6. **A. Ananda Rao et.al.**, “Consistency Evaluation Based on Essential Behavioral Constraints and Structural analysis”, International Journal of Information & Computation Technology, Vol-2, 2012, pp 177-179.
7. **A. Ananda Rao et.al.**, “A Coordinated Software Authentication Method: A Common Attribute Selection and Study Approach”, International Journal of Information & Computation Technology, Vol-2, 2012, pp 383-386.
8. **Ananda Rao et.al.**, “ProtoCheck: Web Application Protocol Anomaly Detection”, International Journal of Advanced Computing, Volume 4, Issue 3 Oct. 2012.
9. **Ananda Rao et.al.**, “Extension of Direct Search Methods to Find Optimal Cluster Centroid for Constrained Multi-Variable Functions,” SearchDL, Fourth International Joint Journal Conference in Engineering, IJJCE 2012 organized by ACEEE-The Association of Computer, Electronics and Electrical Engineers, Int. J. on Recent Trends in Engineering and Technology, Vol. 7, No. 1, July 2012, USA.

## 2013-2014

1. *Ananda Rao et.al.*, “An Hybrid Approach for Analysis of Dynamic Changes in Spatial Data”, International Journal of Database Management Systems (IJDMS), Vol.6, No.1, Feb-2014.
2. *A. Ananda Rao et.al.*, “Optimization of Program Invariants”, ACM SIGSOFT Software Engineering Notes, Vol. 39, Issue 1, Jan. 2014.
3. *A. Ananda Rao et.al.*, “Crop Yield Analysis of the Irrigated Areas of All Spatial Locations in Guntur District of A.P.”, International Journal of Engineering Research and Applications, June 2014.

## 2014-2015

1. *A. Ananda Rao et.al.*, “Analysis of Various Crop Yields in Different Spatial Locations of Karimnagar District in AP”, International Journal of Computer Science Issues, Jun-2014.
2. *A. Ananda Rao et.al.*, “A Metrics Suite for Variable Categorization to Support Program Invariants”, International Journal of Software Engineering & Applications (IJSEA), Vol.5, No.5, September 2014.
3. *A. Ananda Rao et.al.*, “Assessing the Fault Proneness Degree (DFP) of Change Request Artifacts by Estimating the Impact of Change Request Artifacts Correlation”, International Journal of Information Processing, 8(4), 35-44, 2014.
4. *A. Ananda Rao et.al.*, “Assessment of Change Request Artifacts Impact towards Fault Proneness”, International Journal of Computer Science Issues, Vol. 11, Issue 5, No 1, September 2014.
5. *A. Ananda Rao et.al.*, “Empirical approach for optimizing cumulative network lifetime in WSN with hierarchical clustering technique based on Fuzzy Logic”, The CSI Journal on Computer Science and Engineering Vol 12, No 2& 4, pp 47.-58. 2014.
6. *Ananda Rao, et.al.*, “Data Driven Methods For Adaptation of ASR Systems”, IAENG Transactions On Engineering Sciences, May 2015 pp 327-341. ISBN: 978-981-4667-7.

## 2015-2016

1. *A. Ananda Rao et.al.* “Efficient Load Balancing Schema using Multiple Mobile Sink”, International Journal of Computer Applications, Foundation of Computer Science, New York, USA, July 18, 2015.
2. *A. Ananda Rao et.al.* “Routing Optimization with Load Balancing: an Energy Efficient Approach”, International Journal of Advance Networking and Applications, Volume 7, Issue 1(July-August Issue 2015).

3. **A. Ananda Rao et.al.** “Data Labeling Method for Clustering Time-Evolving Categorical Attributes”, Global Journal of Computer Science and Technology: C Software & Data Engineering Volume 15 Issue 5 Version 1.0 Year 2015.
4. **A. Ananda Rao et.al.,** “Phonetic distance based accent classifier to identify pronunciation variants and OOV words”, Signal & Image Processing : An International Journal (SIPIJ) Vol.6, No.4, August 2015.
5. **A. Ananda Rao et.al.,** An improved Similarity Measure for Text Clustering and Classification, American Scientific Publisher-Advanced Science letters-2015, Vol 21, Nov 2015, ISSN: 1936-6612 (Print), EISSN: 1936-7317.
6. **A. Ananda Rao et.al.,**”Text clustering Using Incremental Frequent Patterns Mining approach, International Journal of Data Mining & Knowledge Management Process, IJDKP-Sep-2015, Vol 5, 2015, pages 53-66, ISSN: 2230-9608(online), 2231-007X(print).
7. **A. Ananda Rao et.al.,** "Efficient Load Balancing schema using Multiple Mobile Sink” International Journal on Computer Application Vol 122, No 8, pp 42-49. July 2015.
8. **A. Ananda Rao et.al.** “Ensemble of Soft Decision Trees Using Multiple Approximate Fuzzy-Rough Set Based Reducts”, International Journal of Information Processing, Vol: 9-2, 2015, pp: 36--46. ISSN No: 0973-8215.
9. **A. Ananda Rao et.al.** “A Generic Framework for Configuration Management of SPL and Controlling Evolution of Complex Software Products”, ACM SIGSOFT Software Engineering Notes, Volume 41 Issue 1, January 2016.
- 10.**A. Ananda Rao et.al.** “Change Propagation in Software Product Lines Using ACP Algorithm” Transactions in Engineering Technologies ISBN:978-981-10-05503 Published by Springer, March-2016.
- 11.**A. Ananda Rao et.al.** “Leveraging Configuration Management And Product Derivation Using Variability Aware Design patterns”, Journal on software Engineering, vol 10 No. 3 January-March, 2016.
- 12.**A. Ananda Rao et.al.** “Text Document Clustering and Classification using Improved Similarity Measure”, International Journal of Computer Science and Information Security (IJCSIS), Special Issue Feb 2016, ISSN: 1947-5500.

#### **2016-2017**

1. **Ananda Rao et.al.,** “Ensemble of Randomized Soft Decision Trees For Robust Classification”, Sadhana Journal, Vol: 41-3, 2016, pp:273--282. ISSN No: 0256-2499.



2. **A. Ananda Rao et.al.** “Dynamic pronunciation modeling for unsupervised learning of ASR systems, IETE Journal of Research, published online (2016), 1-11, DOI: 10.1080/03772063.2015.1119660.
3. **A. Ananda Rao et.al.** “A Model Driven Framework for Automatic Detection and Tracking Inconsistencies”, *Journal of Software* vol. 11, no. 6, pp. 538-553, 2016, ISSN: 1796-217X.
4. **A. Ananda Rao et.al.** “Ensemble Pruning of Internet Traffic Classifiers for Security Applications”, *South Asian Journal of Engineering and Technology* Vol.2, No.28 , 2016.
5. **A. Ananda Rao et.al.** “Automation of Test Knowledge Reconfiguration for Web Services”, *South Asian Journal of Engineering and Technology* Vol.2, No.28, 2016.
6. **A. Ananda Rao et.al.** “Detection of Code-Smells by using Particle Swarm Optimization Technique”, *South Asian Journal of Engineering and Technology* Vol.2, No.28, 2016.
7. **A. Ananda Rao et.al.**, “An Extended Model Driven Framework for End-to-End Consistent Model Transformation”, *Indian Journal of Computer Science and Engineering (IJCSE)*, Vol. 7 No. 4, pp. 118-132, Aug-Sep 2016.
8. **Dr. A. Ananda Rao**, “Hadoop based Feature Selection and Decision Making Models on Big Data”, *Indian Journal of Science and Technology*, March 2016, (INJST) ISSN: 0974-6846.
9. **Dr. A. Ananda Rao**, “HBS-CRS: Scaling Impact of Change Request Towards Fault Proneness: Defining a Heuristic and Biases Scale (HBS) of Change Request Artifacts (CRA)”, *International Journal of Software Engineering and its Applications*, ISSN: 1738-9985, Communicated, June 2016.
10. **Dr. A. Ananda Rao**, “Ontology Based Feature Models and Variability Management for Dynamic Reconfiguration of Software Product Lines”, *International Journal of Software Engineering (IJSE)*, ISSN: 2090-1801, June 2016.
11. **Dr. A. Ananda Rao**, et.al, “Energy Efficient Dynamic Reconfiguration of Routing Agents for WSN Data Aggregation”, *Emerging Research in Computing, Information, Communication and Applications*, 2016.

## **2017-2018**

1. **Dr. A. Ananda Rao**, “Metrics for Consistency Checking in Object Oriented Model Transformations”, *Computer Modelling & New Technologies* 2017 Vol. 21 No.2, pp. 29-36.

2. **Dr. A. Ananda Rao**, “Protecting Privacy of Big Data in presence of untrusted Mapper and Reducer”, Published in IJCSE (Indian Journal of Computer science & Engineering), ISSN No: 0976-5166, Vol 8, No 3, June – July 2017, Page Nos: 201-209.
3. **Dr. A. Ananda Rao.**, ”Design and Implementation of Task Reprocessing on Medium-large Multi-Core Architecture”, Application and Theory of Computer Technology, Volume 2, Issue (3), ISSN 2514-1694, pp. 25-34, 2017.
4. **Dr. A. Ananda Rao.**, “Enhancing the Performance of Coverage-Based Techniques in Test Case Prioritization”, International Journal of Scientific Research in Computer Science, Engineering and Information Technology, Volume 2, Issue 5, October 2017.
5. **Dr. A. Ananda Rao**, “Toward Secure Computations in Distributed Programming Frameworks: Finding Rogue nodes through Hadoop logs”, JATIT (Journal of Theoretical and Applied Information Technology). Volume .95. No 23, 15th December 2017.
6. **Dr. A. Ananda Rao**, “Secure Big Data Storage In Cloud & Data Computing Using Cryptographic Techniques”, In JEAS (Journal of Engineering and Applied Sciences), 2017.
7. **Dr. A. Ananda Rao**, “Classifications, Assessments and characteristics as Factor towards Analyzing Organizational Knowledge”, Journal of Theoretical and Applied Information Technology, 2017.
8. **Dr. A. Ananda Rao**, “A Contemporary Hadoop Based Framework for Feature Clustering and Classification of Biomedical Datasets”, Egyptian Informatics Journal.
9. **Dr. A. Ananda Rao**, “Cost Effective Model Based Regression Testing”, IAENG- World Congress on Engineering, Vol. I-WCE 2017, pp241-246, July 5-7, 2017, London, U.K., 2017.
10. **Dr. A. Ananda Rao**, “A Framework to Detect and Prevent Multi-Tenant Cloud Infrastructure against Cache Based Attack”, International Journal of Information Technology & Web Engineering, 2017.
11. **Dr. A. Ananda Rao**, “Secure Data Retrieval in Cloud Computing Using Homomorphic Cryptographic Approach”, International Journal of Applied Engineering Research, 2017.

## **2018-2019**

1. **Dr. A. Ananda Rao**, “Partitional Based Clustering Algorithms on Big Data Using Apache Spark”, International Journal of Scientific Research in

Computer Science, Engineering and Information Technology (IJSRCSEIT, Volume 3, Issue 5, May-June.2018, ISSN: 2456-3307.

2. **Dr. A. Ananda Rao**, “Relevant Keyword Search for Building Service-Based System”, In JCSE (International Journal of Computer Sciences and Engineering). Volume.6, Issue 7, July 2018. E-ISSN: 2347-2693.
3. **Dr. A. Ananda Rao**, “Improving State Invariant Test Oracle Strategy using Mutation Analysis”, In IJCTT (International Journal of Computer Trends and Technology). Volume.61, Number 2, July 2018.
4. **Dr. A. Ananda Rao**, “Testing Refactoring Implementations of Object-Oriented Systems”, In JCSE (International Journal of Computer Sciences and Engineering). Volume.6, Issue 7, July 2018. E-ISSN: 2347-2693.
5. **Dr. A. Ananda Rao**, “Improving Performance of Map Reduce using DLajs Algorithm”, In JCTT (International Journal of Computer Trends and Technology). Volume.61, Number 1, July 2018.
6. **Dr. A. Ananda Rao**, “PABR Algorithm for Improving the Data Archival Performance of a HDFS”, In JCSE (International Journal of Computer Sciences and Engineering). Volume.6, Issue 7, July 2018. E-ISSN: 2347-2693.
7. **Dr. A. Ananda Rao**, “A Survey of Discriminating Distributed DoS Attacks from Flash Crowds”, Springer, Computer Science Proceedings, Communications in Computer and Information Science Series, pp. 733-742, ISSN: 1865-0929.
8. **Dr. A. Ananda Rao**, “An Approach to Distinguish the Conditions of Flash Crowd versus DDos Attacks and to Remedy a Cyber Crime”, International Journal of Computer Engineering & Technology (IJCET), Volume 9, Issue 2, April 2018, pp.110-123, ISSN Print:0976-6367, ISSN Online: 0976-6375.
9. **Dr. A. Ananda Rao**, “Jananee Janmabhoomischa: ICT Solutions for the Pronational Digital Society”, International Journal of Engineering and Technology (IJET), Vol. 7, No. 3, 2018, ISSN: 2227-524X.
10. **Dr. A. Ananda Rao**, “Research Work and Publications –A Useful Study for Augmenting Good Publication Skills”, Journal of Emerging Technologies and Innovative Research (JETIR), Vol. 5, Issue.8, 2018, pp.813-821, ISSN: 2349-5162.
11. **Dr. A. Ananda Rao**, “A Wolf in Sheep’s Clothing- Fake Government of Telangana (FGoT), JNTUJAC: Why ‘not prohibited?’ ”, International Journal of Management, Technology and Engineering (IJMTAE), Vol. 8, Issue XI, November2018, pp.532-542.

- 12.**Dr. A. Ananda Rao**, “An IT-Empirical Defusion of Online Offline Fake Government of Telangana (OOFGoT)”, International Journal of Management, Technology And Engineering(IJMTAE), Vol. 8, Issue XI, November2018, pp.532-542.
- 13.**Dr. A. Ananda Rao**, “An Approach to Regression Testing Based on Grounded Theory Specifications”, International Journal of Computer Sciences and Engineering, Vol.-6, Issue-6, pp: 352-361, June 2018, E-ISSN: 2347-2693.
- 14.**Dr. A. Ananda Rao**, “A Model Driven Approach to Regression Testing for Software Modernization”, International Journal of Scientific Research in Computer Science Applications and Management Studies, Volume 7, Issue 3, pp: May 2018.
- 15.**Dr. A. Ananda Rao**, “AMAP: Adaptive Multi-Level Authentication Protocol in Cloud Environment”, International Journal of Information Technology & Web Engineering (IJITWE), Vol. 96. No 09, E-ISSN: 1817-3195, ISSN: 1992-8645, 15<sup>th</sup> May 2018.
- 16.**Dr. A. Ananda Rao**, “Adaptive Multilevel Fuzzy-Based Authentication Framework to Mitigate Cache Side Channel Attack in Cloud Computing”, International Journal of Modeling Simulation and Scientific Computing, Vol. 09, No 05, June 2018.
- 17.**Dr. A. Ananda Rao**, “Understanding Perception of Cache-Based Side-Channel Attack on Cloud Environment”, Progress in Intelligent Computing Techniques, 2018.
- 18.**Dr. A. Ananda Rao**, “A Novel Multi-class Ensemble Model Based on Feature Selection Using Hadoop Framework for Classifying Imbalanced Biomedical Data”, 2019, International Journal of Business Intelligence and Data mining.

#### **2019-2020**

1. **Dr. A. Ananda Rao**, et.al, “Automated Test Case Generation in Entity Reconciliation Applications”, In IJAEMA (The International Journal of Analytical and Experimental Modal Analysis) August 2019, Volume XI.
2. **Dr. A. Ananda Rao**, et.al, “Improving Efficiency of Quality Correlation in Query Using Spark”, In IJSRCSEIT (International Journal of Scientific Research in Computer Science, Engineering and Information Technology) July 2019.
3. **Dr. A. Ananda Rao**, et.al, “Reduction of Search Space in RESTful Service Discovery”, In IJRCSEIT (International Journal of Scientific Research in Computer Science, Engineering and Information Technology) July 2019

4. **Dr. A. Ananda Rao**, et.al, “Test Case Generation for Boolean Expressions by Using Set and Cell Covering”, In IJAEMA (The International Journal of Analytical and Experimental Modal Analysis) August 2019.
5. **Dr. A. Ananda Rao**, et.al, “Trust Value Calculation for Cloud Resources”, In IRJET (International Research Journal of Engineering and Technology) July 2019.
6. **Dr.A. Ananda Rao**, et.al, “Improving the Quality of Recovered Architectures Using Weighted Dependencies”, In IJAEMA (The International Journal of Analytical and Experimental Modal Analysis) August 2019.
7. **Dr. A. Ananda Rao**, et.al, “System Architecture and Development using Spark for Effective Resource Management in NAWEC Ltd, The Gambia” , In IJSREM(International Journal of Scientific Research in Engineering and Management) June 2020.

#### **National Journals:**

1. **A.Ananda Rao et.al**, “Performance comparison of TCP Congestion Control Algorithms, Vol. 87, Nov 2006, Institution of Engineers, India.

#### **b. International/ National Conferences:**

International Conferences	:	92
National Conferences	:	13

#### **International Conferences:**

##### **2000**

1. **Ananda Rao et.al.**, “Version Management in Unified Modeling Language”, Proceeding of 6<sup>th</sup> International conference Object Oriented Information Systems (OOIS 200), December 18-20, 2000, pp.238-252, London.

##### **2004**

1. **Ananda Rao et.al.**, “Three Level Semantics-Based Version Management in Unifide Modeling Language”, International Conference on Computer Science, Software Engineering, Information Technology, E-Business, and Application (CSITeA 2004), December 27-29, 2004, Cairo, Egypt.

##### **2005**

1. *Ananda Rao et.al.*, “Software Design Versioning Using Propagation Probability Matrix”, Third International Conference on Computer Applications (ICCA’ 2005), March 2005 at Yangon, Myanmar.
2. *A. Ananda Rao et.al.*, “A Metrics Suite for Version Management”, Proceeding of IEEE International Conferences on Information Technology: Coding and Computing (ITCC 2005), April 2005 Las Vegas, Nevada, USA.
3. *A. Ananda Rao et.al.*, “Semantics Based Design Change Propagation Probability Matrix”, Proceedings of IEEE International Conference on Information Reuse and Integration (IRI 2005), August 15-17 2005 Las Vegas, Nevada, USA.
4. *A. Ananda Rao et.al.*, “Change Propagation Probability for Software Design”, Proceedings of Information Technology and Entrepreneurship (ITE 2005), Langston University, Oklahoma, USA. Las Vegas, Nevada, USA.
5. *A. Ananda Rao et.al.*, “A Metrics Suite for Version Management, Proc. Of IEEE International Conference on Information Technology: Coding and Computing (ITCC 005), April 2005, Las Vegas, Nevada, USA.
6. *A. Ananda Rao et.al.*, Software Design Versioning using Propagation Probability Matrix, In Proceedings of Third International Conference on Computer Applications, January-2005.

## **2006**

1. *Ananda Rao et.al.*, “Categorization of Coupling and Cohen from Version Management Perspective”, Proceedings of IEEE International Conference on Information Technology: New Generations, ITNG 2006, April 10-12, 2006.

## **2007**

1. *Ananda Rao et.al.*, “A Novel Thinning Based Algorithm for Fixing Attack Point in a Target Moving in Combat Space”, Presented and published in, International Conference on Systemics, Cybernetics, and Informatics – 2007 (ICSCI-2007), Hyd., Jan 03-07, 2007 (This paper got best paper award in the technical session in which it was presented).
2. *A. Ananda Rao et.al.*, “ Improved Low Computation Cost User Authentication Scheme For Mobile Communication”, INTL-INFOTECH 2007, Haldia Institute of Technology, West Bengal, 19-21 March 2007.

## **2008**

1. *Ananda Rao et.al.*, “A Quantitative Method to Detect Design Defects and to Ascertain the Elimination of Design Defects after Refactoring”, Published in

WORDCOMP'08: The 2008 Int'l Conf. on Software Engg. Research and Practice (SERP'08), 14-17 July 2008, Las Vegas, Nevada, USA, pp. 79-85.

2. **A. Ananda Rao et.al.**, “An Extensible Model Frame Work for Amalgamated Static and Dynamic Analysis” In International Conf. on Recent Trends in Computational Science 2008 (ICRTCS08) on 11<sup>th</sup> June 08.
3. **A. Ananda Rao et.al.**, “Reverse Engineering of UML Sequence Diagrams Towards Distributed Applications”, International Conference on Recent Trends in Computational Science – 2008 (ICRTCS-08) on 12<sup>th</sup> June 08
4. **A. Ananda Rao et.al.**,” Improving the Detection of Bad Smells in Code for Refactoring Methods “. ICRTCS 08 on 12 th June 08.
5. **A. Ananda Rao et.al.**, “A Verification Methodology for Data Structure Consistency “(ICRTCS08) on 13<sup>th</sup> June 08.
6. **A. Ananda Rao et.al.**, ”Complementary Analysis of Software Architecture Styles”,ICRTCS-08.
7. **A. Ananda Rao et.al.**, “A Extensible Meta Model Framework for Amalgamated Static and Dynamic Analysis”, ICRTCS 08: International Conference on Recent Trends in Computational Science 2008, 11-13 June, 2008.
8. **A. Ananda Rao et.al.**, “A Verification Methodology for Data Structure Consistency”, ICRTCS 08: International Conference on Recent Trends in Computational Science 2008, 11-13 June, 2008.
9. **A. Ananda Rao et.al.**, “Complementary Analysis of Software Architectural Styles”, ICRTCS 08: International Conference on Recent Trends in Computational Science 2008, 11-13 June, 2008.
10. **A. Ananda Rao et.al.**, “Improving the Detections of Bad Smell in Code for Refactoring Methods”,ICRTCS 08: International Conference on Recent Trends in Computational Science 2008, 11-13 June, 2008.

## **2009**

1. **Ananda Rao et.al.**, “A Quantitative Evaluation of Software Quality Enhancement by Refactoring Using Dependency Oriented Complexity Metrics”, presented and published in IEEE ICETET'09 (International Conference on Emerging Trends in Engg. and Technology), 16-18 Dec. 2009, Nagpur, India.
2. **A. Ananda Rao et.al.** , “Model-Driven Software Evolution: The Multiple Views”, in the proceedings of IAENG International conference on Software Engineering Conference, IMECS 2009, March 17-20, 2009, HongKong.
3. **A. Ananda Rao et.al.**, “A Visualization Framework for Model-Driven Software evolution”, in the proceedings of IEEE International Advanced

Computing Conference (IACC'09), March 6-7, Thapar University, Patiala, Punjab. It is also published in IEEE Xplore.

4. **A. Ananda Rao et.al.**, “An Approach to test case Design for cost effective Software Testing”, IMECS-IAENG-2009. Later Published in the Journal, Lecture Notes in Engineering and Computer Science, Year: 2009, Vol: 2174 Issue: 1 Pages/record No.: 1044-1050.
5. **A. Ananda Rao et.al.**, “An Extended Framework for Software Architecture Virtualisations”, International Conference on Scientific Computing (cse 09), 13-16 July, 2009, USA.
6. **A. Ananda Rao et.al.** “Visualizing the Pattern Related Information With a UML Profile”, International Conference on Scientific Computing (cse 09), 13-16 July, 2009, USA.
7. **A. Ananda Rao et.al.** “Visualising The transfer Object Pattern in Distributed Networks”, International on Operational Research Applications in Emerging and Management, 27-29 may, 2009. Anna University, Tamil Nadu.
8. **A. Ananda Rao et.al.**, ”An Efficient Technique for Improving Dynamic Program Invariant Detection Tool”, International Conference on Operations Research Applications in Engineering and Management (ICOREM-2009), May 27-29.

## 2010

1. **Ananda Rao et.al.** “Poster paper: Similarity Based Metrics for Performing Extract Class Refactoring for the Class Affected by Ripples”, Presented in ACM ISEC 2010 (3<sup>rd</sup> India Software Engg. Conference), Feb 25-27, 2010, Mysore, India.
2. **A. Ananda Rao et.al.** “An Approach to Requirements Elicitation And Analysis Using Goal” ICSTE 2010: IEEE International Conference on Software Technology and Engineering, October 3-5, 2010 pp 218-221 San Juan, Puerto Rico, USA.
3. **A. Ananda Rao et.al.**, “Software Defect Detection and Process Improvement using Personal Software Process Data” ICCCT 10, 2010 IEEE International Conference on Communication Control and Computing Technologies October 07-09, 2010, SAES, pp 794-799 Ramanathapuram, Tamilnadu, India.
4. **A. Ananda Rao et.al.** “Identification and Removal of Short Gun Surgery Bad Smell”, International Conf. on Computer Applications (ICCA-2010) Dec. 24-27, 2010.



5. **A. Ananda Rao et.al.** “Software Defect Detection and Process Improvement Using PSP Data”, International Conference on Emerging Trends in Engineering and Technology “(IETET 2010). Kurukshetra, Haryana.
6. **A. Ananda Rao et.al.** “A Merging Technique to Reduce Software Merging Conflicts in Object Oriented Refactorings”, ICCA-2010. Tamilnadu, India.
7. **A. Ananda Rao et.al.** , “A Tool Environment for Requirements in Web Systems “, International Conference on Computer Applications (ICCA-2010) India.
8. **A. Ananda Rao et.al.** “Identification of High Level Structural Clones in Software Applications “, ICCA -2010 Tamilnadu , India.
9. **A. Ananda Rao et.al.** , “A Model for Software Performance Analysis”, International Conference on Computer Applications and Information Technology CAIT-2010. 3<sup>rd</sup> sept, 2010.
10. **A. Ananda Rao et.al.** , “Metrics Based API Impact Measuring of Large Scale OOPS Applications”, In National Conference on Recent Trends In Mathematical Sciences 30-31 march 2010, Andhra Pradesh, India.
11. **A. Ananda Rao et.al.** “Securing the Web Applications by Analyzing the Database Server or Web Server”, IETET-2010, Haryana, India. 14<sup>th</sup> -16<sup>th</sup> Oct.
12. **A. Ananda Rao et.al.** , “March Multiple Access with Reduced Hand Shake”, Inter. Conf. On International Trade and Commerce in the Area of Information Technology 5<sup>th</sup> -7<sup>th</sup> march 2010.
13. **A. Ananda Rao et.al.** , “Identifying the Faulty Classes in Object Oriented Systems Using Conceptual Metrics”, International Conference in Computer Applications (ICCA-2010), India.
14. **A. Ananda Rao et.al.**, “Reducing the Complexity of Software Architectural Models”, International conference on Computer Applications (ICC2010).

## 2011

1. **A. Ananda Rao et.al.** “A Semantic Model for Model-Driven Software Evolution”, International Conference on Software Engineering (CONSEG 2011), Feb 17-19, 2011, Bangalore, Karnataka, India.
2. **A. Ananda Rao et.al.**, "An Approach to Test Case Design for Cost Effective Regression Testing", 4th IEEE International Conference on Computer Science and Information Technology 2011, June 2011, Chengdu, China.
3. **A. Ananda Rao et.al.** “Anomaly Detection Using K-Means Based Clustering Algorithm”, In the Proceedings of MEPCOIT’11, A National

Conference on Convergence on IT Research, March 2011, Mepco Schlenk Engineering College, Siva Kasi , Tamilnadu..

4. **A. Ananda Rao et.al.** “Intrusion Detection Using an Ensemble of Decision Trees” , In the Proceedings of IICAI-11 Fifth Indian International Conference on Artificial Intelligence, Dec 2011, Pages:382-392.
5. **A. Ananda Rao et.al.** “Visible Reverse Nearest Neighbour Query Processing with Ranking” ,ICETT-2011,Kerala, March 2011.
6. **A. Ananda Rao et.al.** , “An Efficient Regression Testing by Computing Coverage Data for Software Evolution”, ICCSI -2011. 19<sup>th</sup> – 20<sup>th</sup> June 2011.
7. **A. Ananda Rao et.al.** , “VM Automation: A Semi Automated Web Based Tool to Provide Interface for Managing Virtualized Environment”, International Conference on Technology and Management (ICTM-2011) June 2011, Hyderabad, India.
8. **A. Ananda Rao et.al.**” Developing a Code Readability Model to Improve Software Quality “ICCSI-2011, 19<sup>th</sup> – 20<sup>th</sup> June 2011, India.
9. **A. Ananda Rao et.al.**, “A New Methods for Reducing Test Suites Using Ping-Pong Heuristics, International Conference on Information, Communication & Embedded Systems (ICICE-201) 23, 24 Feb-2011.
- 10.**A. Ananda Rao et.al.** “Program Behavior Discovery and Verification Induced Grammar Approach”, International Conference on Computational Vision and Robotics (ICCV-2011), 14<sup>th</sup> 15<sup>th</sup> Aug 2011.
- 11.**A. Ananda Rao et.al.**, “Detectors Operating on Programming Languages for the Evaluation of Accuracy in Design Patterns”, international conference on Computer Science & Engineering (ICCSE)-2011 on 2<sup>nd</sup> & 3<sup>rd</sup> Oct 2011 at Bangalore, India, ISBN NO:978-93-81-583-05-0.
12. **A. Ananda Rao et.al.**, “Automated Incremental Test Suite Generation for Regression Testing” International Conference on Control Communication and Computer Technology on 6<sup>th</sup> to 7<sup>th</sup> august 2011 at New Delhi.

## **2012**

1. **Ananda Rao et.al.**, “Identification of Optimal Cluster Centroid for Multi-Variable Functions”, International Conference on Advances in Computing, Communications and Informatics – Advances in Data Management, Chennai, ACM digital library and DBLP indexed, 3-5 Aug 2012.
2. **A. Ananda Rao et.al.**, "An Empirical Analysis of Single Model Test Prioritization Strategys for Event Driven Software", International Conference on Computer Science and Information Technology (ICCSIT), 10<sup>th</sup> June 2012, Tirupati, India.

3. **A. Ananda Rao et.al.**, "Process Model Consistency Measurement", International Conference on Computer Science and Information Technology (ICCSIT), 10<sup>th</sup> June 2012, Tirupati India.
4. **A. Ananda Rao et.al.**, " A Synchronized Software Verification Method: A Common Attribute Selection and Analysis Approach", International Conference on Computer Science and Information Technology (ICCSIT), 14<sup>th</sup> July 2012 Pune, India.
5. **A. Ananda Rao et.al.**, "Service Level Management Approach to Address Dependability of SOA Life Cycle ", International Conference on Computer Science and Information Technology (ICCSIT), 14<sup>th</sup> June 2012 Pune, India.
6. **A. Ananda Rao et.al.**, "Taxonomy of Artifacts In Object oriented development paradigm: Current state of the Art" , published in proceedings of IEEE sponsored International Conference pp 99-106 ICCCA-2012, held at Dindigul, Tamilnadu, 22-24, Feb 2012.
7. **A. Ananda Rao et.al.**, "Graphical Method to find Optimal Cluster Centroid for Two-variable Linear Functions of Concept drift Categorical Data" 2<sup>nd</sup> International Conference on Computational Science, Engineering and Information Technology (CCSEIT-2012), ACM ICPS, Coimbatore, ISBN: 978-4503-1310-0, India, Oct 26-28, 2012.
8. **A. Ananda Rao, et.al.** , "Identification of Optimal Cluster Centroid for Multi-Variable Functions," International Conference on Advances in Computing, Communications and Informatics (ICACCI), ACM ICPS and DBLP indexed, Chennai, Aug 3-5, 2012.
9. **A. Ananda Rao, et.al.**, "Identification of Optimal Cluster Centroid for Unconstrained Nonlinear Multivariable Functions," ART Com- Fourth International Conference on Advances in Recent Technologies in Communication and Computing, by ACEEE (Association of Computer, Electronics and Electrical Engineers) Springer-Verlag LNCS Berlin Heidelberg, Bangalore, Oct 19-20, 2012.

## 2013

1. **A. Ananda Rao, et.al.**, "Globular Topology of Large Scale WSN for Efficient Load Balancing Using Multiple Sink Node", IEEE International Conference on Computing Communication and Network Technologies, July 4-6-13.
2. **A. Ananda Rao, et al.**, "A Technique to support Dynamic Invariant Detection", International Conference on Advanced Computing Methodologies (ICACM-2013), August 02-03, 2013, held at GRIET, Hyderabad.

3. **A. Ananda Rao, et.al.**, “JCADS: Semi-Supervised Clustering Algorithm for Network Anomaly Intrusion Detection Systems” 15th International Conference on Advanced Computing Technologies(ICACT-2013/IEEE Conference), Sept. 10-11, 2013.
4. **A. Ananda Rao, et.al.**, “An Innovative Approach for Representing And Mining Spatial data”, (ICAM-2<sup>nd</sup> International Conference), 2013.

## 2014

1. **A. Ananda Rao, et.al.** “Design and Analysis of Novel Similarity Measure for Clustering and Classification of High Dimensional Text Documents” in ACM-International Conference on Computer Systems and Technologies (CompSysTech-2014), pg:1-8, 27-28 June 2014, Ruse, Bulgaria, Europe. **Awarded best paper.**
2. **A. Ananda Rao, et.al.**, Published a Paper “A Frequent Term Based Text Clustering Approach Using Novel Similarity Measure”, 4th IEEE International Advanced Computing Conference (IACC-2014), vol.4, ISSN NO 978-1-4799-2571-1, 21<sup>st</sup> - 22<sup>nd</sup> Feb-2014, pgno 495-499.
3. **A. Ananda Rao, et.al.** Presented a Paper “Unsupervised Adaptation of ASR Systems Using Hybrid HMM and VQ model”, International Multi-conference of Engineers and Computers Scientists 2014, IMECS 2014, Hong Kong, 12 - 14 Mar 2014, pp 169 – 174.
4. **A. Ananda Rao, et.al.** “Clustering Process for Maximizing Life Time using Probabilistic Logic in WSN”, The Fifth International Conference on Computing, Communications and Networking Technologies (ICCCNT-14), Hefei, Anhui, China during July 11-13, 2014.
5. **A. Ananda Rao, et.al.**, “Assessing and Fault Proneness Degree (DFP) of Change Requests and change Request Artifacts: A Statistical Bipartite Graph Strategy”, International Conference, 2014.

## 2015

1. **A. Ananda Rao, et.al.**, “A Systematic Approach for Configuration Management in Software Product Lines” Lecture notes in Engineering and Computer Science: Proceedings of the International Multi Conference of Engineers and Computer Scientists 2015, IMECS 2015, 18-20 March 2015, Hong Kong, pp470-475.
2. **A. Ananda Rao, et.al.** “Energy Efficient Dynamic Reconfiguration of routing Agent for WSN Data Aggregation” published in Springer proceedings of Third International Conference ERCICA- 2015, Springer Technical Activities, held at NMIT, Bangalore, India.

3. **A. Ananda Rao, et.al.**, “Unsupervised Adaptation of ASR Systems - An Application of Dynamic Programming in Machine Learning”, SAI Intelligent Systems Conference 2015, November 10-11, 2015 | London, UK. IEEE proceedings. IEEE Catalog Number: CFP15C15-ART, ISBN: 978-1-4673-7606-83.

## 2016

1. **A. Ananda Rao**, “XRTSDIC: Towards a Flexible and Scalable Framework for Detecting and Tracking Software Design Inconsistencies”, Proceedings of the first A.P. Science Congress, 21-23 January, 2016.
2. **A. Ananda Rao, et.al.**, “Extensible Real Time Software Design Inconsistency Checker: A Model Driven Approach”, Proceedings of International Multi Conference of Engineers and Computer Scientists (IMECS 2016), 16 - 18, March, 2016, Hong Kong. ISBN: 978-988-19253-8-1 ISSN: 2078-0966.
3. **A. Ananda Rao, et.al.**, “Task Reprocessing on Real-Time Multicore Systems”, ICIA-16: Proceedings of the International Conference on Informatics and Analytics, 25<sup>th</sup> -26<sup>th</sup> August 2016.
4. **A. Ananda Rao, et.al.**, “Reinforcement Learning By Case-Based Reasoning through Self-Organized Neural Networks”, ICACC-2016(International Conference on Advanced Computing and Communications), October 20-22, 2016.
5. **A. Ananda Rao, et.al.**”Generalized Approach to Enhance the Shared Cache Performance in Multicore Platform”, In ICCII (International Conference on Computational Intelligence and Informatics-2016, May-2016.
6. **A. Ananda Rao**, “An Iterative Hadoop-Based Ensemble Data Classification Model on Distributed Medical Databases” in Proceedings of the First International Conference on Computational Intelligence and Informatics 2016.
7. **A. Ananda Rao**, “Performance Analysis of Virtual Machine Introspection Tools in Cloud Environment”, International Conference on Informatics and Analytics (ICIA-16).

## 2017

1. **A Ananda Ra, et.al.**, “Document Clustering and Classification Using Improved Similarity Measure , International Conference on Soft Computing Systems – Springer Publisher, Feb-2017.
2. **A. Ananda Rao**, “A Novel Hadoop Based Feature Clustering and Classification Model for Imbalanced Biomedical Database”, **CSI Journal of Computing**, April, 2017.

3. **Dr. A. Ananda Rao**, et.al. “Document Clustering and Classification Using Improved Similarity Measure, International Conference on Soft Computing Systems – Springer Publisher, Feb-2017.
4. **Dr. A. Ananda Rao**, “A Novel Multi-class Ensemble Model For Classifying Imbalanced Biomedical Datasets”, Materials Science and Engineering, Volume 225, Conference 1, September 2017.
5. **Dr. A. Ananda Rao**, “A Novel Approach to Detect and Mitigate Cache Side Channel Attack in Cloud Environment”, 3<sup>rd</sup> International Conference on “Next Generation Computing Technologies” (NGCT-2017).
6. **Dr. A. Ananda Rao**, “A Survey of Distributed Denial of Service (DDoS) Defense Techniques in ISP Domains”, in 5th International Conference on Innovations in Computer Science and Engineering (ICICSE-2017), Hyderabad, 16-17, Aug 2017, pp. 221-230, ISBN: 978-981-10-8201-6.
7. **Dr. A. Ananda Rao**, “Understanding Perception of Cache Based Side Channel Attack on Cloud Environment”, **International** Conference on Advanced Computing, Networking and Informatics, 05<sup>th</sup> August, 2017.

## 2018

1. **Dr. A. Ananda Rao**, “Experimental Evaluation of Task Reprocessing on Large-Medium Scale Multicore Systems”, 2<sup>nd</sup> International Conference on Integrated Intelligent Computing, Communication and Security (ICIIC-2018), January 2018.
2. **Dr. A. Ananda Rao**, “Survey on Virtual Machine Placement and Migration in Cloud Data Centres”, International Conference on Advances in Usability Engineering for Computing (ICAUEC-2018).
3. **Dr. A. Ananda Rao**, “A Model Driven Approach to Regression Testing of Reusable Software”, International Conference on Artificial Intelligence & Cognitive Computing, AICC-18., 02-03, pp:62, Feb 2018, Hyderabad, India, 2018.

## National Seminars / Conferences:

1. **A.Ananda Rao, et al.** , “The UML Profile for Object Oriented Database Management Systems” , in the proceedings of National Conference on Emerging Principles and Practices of Computer Science & Information Technology (EPPCSIT '06), Aug 18-19, 2006, at Guru Nanak Dev Engineering College, Ludhiana, Punjab

2. **A.Ananda Rao et.al.**, “Software Design Versioning and Version Management”, in the proceedings of 2<sup>nd</sup> National Conference on Computing For Nation Development, INDIACom-2008, 8<sup>th</sup>-9<sup>th</sup> February,2008 at Bharati Vidyapeeth’s Institute of Computer Applications and Management(BVICAM),New Delhi.
3. **A.Ananda Rao et.al.**, “The Evolution of Software Performance Engineering: A Survey” NCCC08. The National Conference on Computing and Communications. NITS, November28-29,2008, pp 134-144 Hyderabad
4. **A.Ananda Rao et.al.**, “Integrated Transport Layer Security: End-To- End Security model between WTLS and TLS”, National Conference on Recent Trends in Information Technology prospects for Global India Brand, 3<sup>rd</sup> 4<sup>th</sup> Feb 2006.
5. **A.Ananda Rao et.al.**, “Detection and Visualization of differences between graphical documents “,National Conference on Recent Trends in Information Technology prospects for Global India Brand, 3<sup>rd</sup> 4<sup>th</sup> Feb 2006.
6. **A.Ananda Rao et.al.**, “Single & MultiSink Energy Optimization in WSNs” published in proceedings of AICTE sponsored national Conference HPCN-2011,High Performance Computing & Networking, held at Rajampet, 13&14, Aug, 2011, ISBN no.978-93-81583-00-5.
7. **A.Ananda Rao et.al.**, “A Coordinated Software Authentication Method: A Common Attribute Selection and Study Approach” National Conference on “Advances In Computer Sciences, communication and Information Technologies”[ACSCIT-2012] on 28<sup>th</sup> July 2012, Jawaharlal Nehru University(J.N.U), New Delhi-110 067 [ISSN 0974-2255].
8. **A.Ananda Rao et.al.**, “Improving Performance and Scalability of Two Sided Markets in SoS”, national conference on “Advances In Computer Sciences, communication and Information Technologies”[ACSCIT-2012] on 28<sup>th</sup> July 2012, Jawaharlal Nehru University(J.N.U), New Delhi-110 067 [ISSN 0974-2255].
9. **A.Ananda Rao et.al.**, “Address Dependability of SOA Lifecycle And Making Web Services Fault Tolerance” national conference on “Advances In Computer Sciences, communication and Information Technologies”[ACSCIT-2012] on 28<sup>th</sup> July 2012, Jawaharlal Nehru University(J.N.U), New Delhi-110 067 [ISSN 0974-2255].
- 10.**A.Ananda Rao et.al.**, “Consistency Evaluation Based on Behavioral Constraints and Structural Analysis” national Conference on Information & computation Technology 2012(IJICT-2012) on 28th July 2012, JNU New Delhi (ISSN No: 0974-2255).

**11.A.Ananda Rao et.al.**, “Assessment Of Software Quality By Code Readability”, national conferences on INTERNET AND WEB SERVICE on 2<sup>nd</sup> and 3<sup>rd</sup> august 2012, at Pondicherry Engineering College, Puducherry, India-605014.

**12.A.Ananda Rao et.al.**, “HTCPM: A Hybrid Test Case Prioritization Model for Web and GUI Application” at the National Conference on “Advances in Computer Sciences, Communication and Information Technologies” [ACSCIT-2012] held at J.N.U, New Delhi on 28<sup>th</sup> july 2012 (ISSN No: 0974-2255 ).

**13.A.Ananda Rao et.al.**, “Categorization of Program Invariants to Support Software Evolution” at the National Conference on Software Engineering (NCSOFT-13) held at Cochin University of Science and Technology, Cochin, India on August 13-14, 2013.s

**c. Book/Book Chapters:**

<b>S.NO</b>	<b>Title of Book/Chapter</b>	<b>Name of the Publication, edition and year</b>	<b>Book / Book Chapter</b>
1	<b>Data Structures and Algorithms Using C++</b>	Ananda Rao Akepogu and Radhika Raju Palagiri, Pearson Education.	<b>Book</b>
2	<b>Programming in C and Data Structures</b>	Jeri R. Hanly, Elliot B.Koffman, Ashok Kamthane and A. Ananda Rao, Pearson Education.	<b>Book</b>
3	<b>Database Management Systems</b>	Peter Rob, A. Ananda Rao and Carlos Coronel, Engage Learning.	<b>Book</b>



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**6. Workshops/Training Programs/FDPs attended and Organized (for the last three years):**

**a. Workshops Organized**

<b>S.No</b>	<b>Workshops</b>	<b>Place</b>	<b>Duration</b>
1	Linux Environment for Educational Institutions	Department of Computer Science and Engineering, JNTU College of Engineering, Anantapur in year 2007	2 days
2	ASPIRE	Department of Computer Science and Engineering, JNTU College of Engineering, Anantapur in year 2010	1 day
3	Market Oriented Cloud Computing and the Aneka platform	Department of Computer Science and Engineering, JNTU College of Engineering, Anantapur in year 2011	1 day
4	Natural Language Processing (NLP)	Department of Computer Science and Engineering, JNTU College of Engineering, Anantapur in year 2013	2 days
5	Faculty Development Program On Software Engineering	Department of Computer Science and Engineering, JNTU College of Engineering, Anantapur in year 2016	2 weeks

6	PIXEL	Department of Computer Science and Engineering in JNTUA College of Engineering for 10 years from 2005	3 days
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### b. Workshops Attended

S.No	Workshops	Place	Duration
1	Resource person for a National Level Workshop on "DATA STRUCTURES"		6 <sup>th</sup> & 7 <sup>th</sup> August-2011
2	<u>NPTEL</u> workshop	NIT, Warangal	31 aug & 1 sep 2012
3	Train-The-Trainer-workshop conducted by Infosys Technologies Limited		22 <sup>nd</sup> & 23 <sup>rd</sup> Sep tember 2005
4	Technology Enhanced Learning Through NMEICT-Implementation of Spoken Tutorial Project	Auditorium of JNTUA college of Engineering, Anantapuram.	10 <sup>th</sup> July, 2014
5	7 <sup>th</sup> National Workshop on RECENT TRENDS IN SOFTWARE TESTING (RTST-2014)	Department of CSE, NIT Rourkela.	12 <sup>th</sup> -14 <sup>th</sup> May 2014
6	Outcome Based Education (OBE), conducted by School of Information Technology	JNTUH, Kukatpalli, Hyderabad	26 October, 2013
7	EMERGING RECENT TRENDS IN SOFTWARE ENGINEERING	VIT-Chennai	April 12 <sup>th</sup> , 2013
8	CYBER SECURITY	JNTUA College of Engineering	8 <sup>th</sup> October, 2015.

9	INNOVATIONS IN TECHNOLOGY	JNTUA College of Engineering	9 <sup>th</sup> December, 2015.
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**c. Training Programs/FDPs Organized**

S.No	Training Programs/FDPs	Place	Duration

**d. Training Programs/FDPs Attended**

S.No	Training Programs/FDPs	Place	Duration

**e. Keynotes/ Session Chairs/ Seminars:**

**Conferences:**

- ❖ Paper presentation at London, U.K. – SAI Intelligent Systems Conference 2015 November 10-11, 2015.
- ❖ The International Multi Conference of Engineers and Computer Scientist 2009 March 18-20 Hong Kong.
- ❖ Paper presentation at Ruse, Bulgaria The International Scientific Conference CompSysTech' 14 27th June, 2014.
- ❖ Paper presentation at Rajampet – 15<sup>th</sup> IEEE International Conference On Advancing Computing Technologies September 21<sup>st</sup>&22<sup>nd</sup>, 2013.
- ❖ Paper presentation at NANDED, Maharashtra Indian Conference on Signal and Image Processing Held on 10&11 July, 2015.
- ❖ Paper presentation at National Conference on Internet and Web Service Computing on 2-3 August 2012.
- ❖ Paper presentation at National Conference on Advances in Computer Sciences, Communication and Information Technology, on 28<sup>th</sup> July, 2012.
- ❖ Paper presentation at The International Conference on Computer Science and Information Technology (ICCSIT) on 10<sup>th</sup> June, 2012.
- ❖ Paper presentation at The International Conference on Advanced Computing Methodologies (ICACM-2013), August 2-3, 2013, Held at GRIET, Hyderabad.
- ❖ Participated in the National Conference “Emerging Principles and Practices of Computer Science & Information Technology” (EPPCSIT'06) held on August 18-19 2006, Ludhiana (Punjab).

- ❖ Paper presentation at The International Conference on Computer Science and Engineering (ICCSE-2011) held on 2<sup>nd</sup> -3<sup>rd</sup> October, 2011, Bangalore.
- ❖ Paper presentation at The International Conference on Advanced Computing Methodologies (ICACM-2011), December 9-10, 2013, Held at GRIET, Hyderabad.
- ❖ Paper presentation at The International Conference on Computing- 2K15, held on 13&14 August, 2015, Narasaraopeta.

#### **Seminars:**

- ❖ National Level Technical symposium-Protocal-2K11.
- ❖ National Level Technical symposium-Protocal-2K13.

#### **Foreign Visits:**

- ❖ Paper presentation at London, U.K. – SAI Intelligent Systems Conference 2015 November 10-11, 2015.

### **7. Academic Details**

#### **a. Subjects courses taken/Labs**

<b>S.No</b>	<b>Undergraduate courses</b>	<b>Post graduate courses</b>
1	Database Management Systems	Advance Data Structures and Algorithms
2	Data Structures	Advances in Software Engineering
3	Software Engineering	Software Quality Assurance and Testing
4	Software Testing	Software Evolution and Maintenance
5	Software Architecture	Knowledge Representation and Reasoning
6	Software Project Management	
7	Design Patterns	
8	Artificial Intelligence	
9	Unified Modeling Language	
10	Operating Systems	

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- ❖ In addition, the laboratories of UG and PG programmes in the areas of Computer Science have been dealt with.

### **b. B. Tech Projects Guided:**

- ❖ Guided 106 Undergraduate projects

<b>S.No</b>	<b>Admission No</b>	<b>Title of the Project</b>	<b>Year</b>

### **c. M.Tech Projects Guided:**

- ❖ Guided 209 Postgraduate projects

<b>S.No</b>	<b>Admission No</b>	<b>Title of the Project</b>	<b>Year</b>

### **d. MCA Projects Guided**

<b>S.No</b>	<b>Admission No</b>	<b>Title of the Project</b>	<b>Year</b>

### **e. Ph.D scholars**

<b>S.No</b>	<b>Name of the Research Scholar</b>	<b>Title of the research work</b>	<b>Research Status</b>
1	J. Kiran kumar	Cost –Effective Software Testing Techniques In Black-Box Environment	2012
2	K.Narendar Reddy	Metrics Based Techniques for Detection and Correction of Ripple Related Design Defects in Object-Oriented Programs	2012
3	K.Madhavi	mRose: A Multiple Views Based Recommendation System in the Context of Model -Driven Software Evolution	2013
4	M.Gopi Chand	Layered Software Models for Identification and Refinement of Performance Requirements	2014
5	Md.Umar Khan	Improving Quality and Performance of Web Applications Design Using Design Patterns	2015

6	Ch. Mallikarjuna Rao	Classification of Spatial Objects by the Development of Suitable Clustering Algorithms	2016
7	P.Radhika Raju	Methodology for Dynamic Program Invariants to Support Software Evolution	2016
8	Amarendra Babu	Unsupervised Data-Driven Pronunciation Adaptation Model for ASR Systems	2016
9	K. Reddy Madhavi	Efficient Clustering Algorithms for Concept-Drift Categorical Data	2016
10	G. Suresh Reddy	Text Document Clustering and Classification Using Improved Similarity Measures	2016
11	M. Rudra Kumar	Maintenance of Software Artifacts Using Machine Learning Approaches	2016
12	G. Kishore Kumar	Intrusion Detection Methods Using an Ensemble of Decision Trees	2017
13	S. Prabhavathi	Design Issues of Energy-Efficient communication Protocol for Wireless Sensor Networks	2017
14	K.L.S. Sowjanya	Configuration Management and Product Derivation in Product Line Software Systems	2017
15	D. Ratna Kishore	An Efficient Chaining Graph Segment+ation Models for Human Activity Detection on Real Time Noise Video Databases	2018
16	G. Ramesh	Consistency Checking During Transformation of Object Oriented Software Design Models	2018
17	B. Tulasi	Hadoop based decision -making system using classification techniques	2018
18	P. Pavan Kumar	Design & development of soft real-time scheduler for enhancing the shared cache performance in multi core systems	2018
19	N. Madhusudhana Reddy	Secure Computations in Distributed Programming Frameworks For Processing Big Data.	2019
20	A. Bharathi	Detection & mitigation of cache side channel attacks in multi tenant cloud environment	2019
21	K. Prabhakar	Model Based Techniques For Cost Effective Regression Testing	2019
22	P.L. Kishan Kumar Reddy	Concurrency Control in Federated Databases using Global Serialization Order Approach	2019
23	SriHari Rao		2020

## Details of Ph. D's under the supervision (Presently)

S. No.	Names of Research Scholar	Area of the Research
1	G. Swapna	Software Engineering
2	BBK. Prasad	Big Data
3	T. Swathi	Big Data
4	D. Ravi Kumar	Software Engineering
5	Kongarana Srinivasa Rao	Software Engineering
6	P. Naga Raju	Social Networks
7	Abdul Aziz MD	Artificial Intelligence

## 8. Development activities

### a. Product Development:

- ❖ **Central Computer Centre** has been established.
- ❖ **Campus Wide Networking** has been established.
- ❖ **MOOCs courses** are introduced in the UG&PG curriculum.
- ❖ **Choice Based Credit Courses** are introduced in the UG&PG curriculum.
- ❖ **Online Examination** is introduced in the UG&PG curriculum.
- ❖ **Gap year concept** is introduced in the UG curriculum.
- ❖ **Minor Degree/Discipline concept** is introduced in the UG curriculum.
- ❖ **Digital Diary and Digital Calendar** are developed and uploaded in JNTUA Website ([www.jntua.ac.in](http://www.jntua.ac.in)).

### b. Research laboratories:

### c. Instructional materials:

d. Working models/charts/monograms etc:

**Working Experiences:**

**Examiner:**

- ❖ State level committee member for EAMCT-2012 by APSCHE Chairman.
- ❖ Admission Officer for PGECET-2012.
- ❖ ECET-2012 admission committee member by APSCHE chairman.
- ❖ University representative for ICET-2013.
- ❖ Regional coordinator to conduct EAMCET-2013.
- ❖ Regional coordinator to conduct EAMCET-2011.
- ❖ Regional coordinator to conduct EAMCET-2012.
- ❖ Regional coordinator to conduct ECET-2011.
- ❖ Regional coordinator to conduct ECET-2012.
- ❖ Regional coordinator to conduct ICET-2011.
- ❖ Regional coordinator to conduct ICET-2012.
- ❖ Observer for Conducting CMAT Examination 2013-14.
- ❖ Presiding officer to conduct GATE-2011.
- ❖ Presiding officer to conduct GATE-2012.

**Reviewer of Research papers and Member of Editorial Board :**

- ❖ International Conference held at GRIET, Hyderabad in the area of Advanced Computing Methodologies.
- ❖ I-Managers Journal, Software Engineering.

**Staff Selection Committee:**

- ❖ Expert member of staff selection in JNT University, Anantapur.
- ❖ Expert member of staff selection on Career Advancement Scheme in JNT University, Anantapur.
- ❖ Expert member of staff selection on Career Advancement Scheme in JNT University, Kakinada.
- ❖ Expert member of staff selection on Career Advancement Scheme in Bangalore University, Bangalore.
- ❖ Expert member of staff selection on Career Advancement Scheme in SV University, Tirupati.

**Curriculum Design:**

- ❖ Chairperson of U.G Board of studies Computer Science and Engg., JNTU College of Engineering, Anantapur.



- ❖ Chairperson of P.G Board of studies Computer Science and Engg. JNTU College of Engineering, Anantapur.

### **Important positions held:**

- ❖ Chairman, Board of Studies, JNT University Anantapur for UG and PG programs.
- ❖ Board of Studies member in erstwhile JNT University.
- ❖ Board of Studies member in Department of Computer Science and Engg., JNTUK College of Engineering, Vijayanagaram.
- ❖ Board of Studies member in JNT University Kakinada for UG and PG programs.
- ❖ Board of Studies member for Lakki Reddy and Bali Reddy College of Engineering, Vijayawada, RGM College of Engg. & Tech., Nandyala, Annamacharya Institute of Tech. & Sciences, Rajampet.
- ❖ Member of various AICTE expert committees and advisory committees of several institutions.
- ❖ Invited as Keynote speaker for 20 events in various Engineering Colleges.
- ❖ Acted as Judge for 20 Technical Students Symposiums in various Engineering Colleges.
- ❖ Improved Infrastructure facilities like Campus Wide Network, Central Computer Centre and Sun Solaris Lab at JNTUA College of Engineering, Ananthapuramu.
- ❖ Recipient of travel grants from UGC for paper presentation at London, UK.

### **9. Administrative works supported:**

- ❖ **Central Computer Centre** has been established.
- ❖ **Campus Wide Networking** has been established

### **10. Awards and Rewards:**

- ❖ **Best Teacher Award** from **State Govt. of A.P**, on 5<sup>th</sup> Sept. 2014 at Guntur.

- ❖ **Best Computer Science Engineering Teacher Award** from **ISTE A.P Section**, award function held at GITAM University, Hyderabad on 30<sup>th</sup> Nov. 2013.
- ❖ **Best Research Paper Award** for the paper titled “An Approach to Test Case Design for Cost Effective Software Testing” in an International Conference on Software Engineering held at Hong Kong, 18-20 March 2009.
- ❖ **Best Research Paper Award** for the paper titled “JCADS: Semi-Supervised Clustering Algorithm for Network Anomaly Intrusion Detection Systems” in an IEEE International Conference on Advanced Computing Technologies held at AITS Rajampet on 21-22 Sep. 2013.
- ❖ **Best Paper Award** for the paper titled “Design and Analysis of Novel Similarity Measure for Clustering and Classification of High Dimensional Text Documents” in 15<sup>th</sup> ACM-International Conference on Computer Systems and Technologies (CompSysTech-2014), pg:1-8, on 27-28 June 2014, Ruse, Bulgaria, Europe.
- ❖ **Best Educationist Award** for outstanding achievements in the field of education by International Institute of Education & Management, New Delhi on 21<sup>st</sup> Jan. 2012.
- ❖ **Bharat Vidya Shiromani Award** for outstanding achievements in the field of education from Indian Solidarity Council, New Delhi on 19<sup>th</sup> March, 2012.
- ❖ **Rashtriya Vidya Gaurav Gold Medal Award** for outstanding achievements from International Institute of Education & Management, New Delhi on 19<sup>th</sup> March, 2012.
- ❖ **Eminent Educationist Award** for outstanding achievements from International Institute of Education & Management, New Delhi on 15<sup>th</sup> April, 2012.

### **13.Social activities (NSS/NCC/Any other):**

- ❖ Actively involved in national building activities NSS and Sports
- ❖ Actively involved in super specialty health camp and taking active part in bringing the patients
- ❖ Actively involved in the community service program for training senior citizens on computer awareness
- ❖ Actively involved in the adult literacy, rural youth, house-wives programs
- ❖ Actively involved in the university staff selection committees
- ❖ Services to other academic institutions

Declaration:

I hereby declare that the information furnished above is true to the best of my knowledge

Dr. A. Ananda Rao

Date: 15-01-2021

Anantapur