Name: Dr. E. Venkata Ramana

Designation: Professor
Department: Mechanical
Mail I'd: venkataramana_e@vnrvjiet.in

Experience (in years):   Teaching: 25   Research: 14   Others (if any, specify): 6

1.   Educational / Technical qualifications:

S.No	Level (UG / PG / Ph. D)	Year of passing	Specialization
1	B.E	1988	Mechanical
2	P.G.D.C.A	1991	
3	M.Tech	1992	Energy Systems
4	M.Tech	1997	CAD/CAM
5	Ph. D	2015	Mechanical

2. Teaching and Learning:

2.1. Teaching Interests: Automation, Industrial Robotics, Automation & Robotics, CAD/CAM, CAM, C Programming

2.2. Novel Teaching & Learning Techniques adopted: PPT, Prototype Models, Computer Simulation, POGIL, VNR Lab Protocol, WIT&WIL

Involvement in curriculum updating / Design: UG and PG Curriculum Design and Revision

3. Co-curricular and Extra-Curricular Activities

3.1. Interests and Hobbies: Software development and updating knowledge in emerging technologies such as Machine Learning, Predictive Analytics in Manufacturing etc.

3.2. CCA/ECA Organized:
- Organized Webinar on "Preparing oneself for Industry 4.0" by Sri. Vemuri Venkata Ramana, 13th August, 2020.

- Organized "Webinar on Natural Composites for Sustainable Development" by Dr. K. Ajay Kumar, Assoc. Professor, Department of mechanical Engineering, VNRVJIET, 1st June, 2020.
- Organized guest lecture "**Design Automation using NX software"** by Mr. Murali Krishna M,
  Managing Director, Jytra Technology Solutions Pvt. Ltd on 25th October,2017.
- **National Level Technical Symposium organised by** Shadan College of Engineering &
  Technology, Hyderabad (**Techno Spirit** 2009 & 2010) as a *Coordinator.*
- Organized Induction Programme for UG students by Mr. Murali Krishna M, Managing Director,
  Jytra Technology Solutions Pvt. Ltd, 5th Dec, 2020.
- Organized the Development of Machine Learning Use Case Video in Mechanical Engineering, 2021.

3.3. CCA/ECA participated:

IGNITE 2016 organised by Guru Nanak Institutions Technical Campus & Guru Nanak Institute of Technology on 2nd April, 2016 as a **Judge** in paper presentation event.

3.4. Counseling and Mentoring Activity: Student counseling and career guidance.

3.5. Committees involved in:

Department level: Academic Committee, NBA, NAAC, Academic Council, Software

Design of

Revision,

Review

Establishment,

Development, Examination Paper Evaluation, Student Discipline,

UG catalogue and task books, UG&PG Curriculum Design and

Staff Selection Committee, Comprehensive Viva, Project

Committee, UGC Autonomous, Research Committee, Lab

Maintenance, Student Discipline and Seminar Committees

Institute Level: CBCS, R&D, IQAC, Stock Verification committees

1. **Conference / Workshop / Seminar / Guest Lectures :**

4.1 Conducted:

   1. Faculty Development Programme on Engineering Drawing and Engineering Graphics at
      G.N.I.T.C, Aug, 2015 as a **Convener**

   2. National conference on "Recent Trends in Mechanical Engineering" at Shadan College of
      Engineering & Technology, Hyderabad on 18th October, 2012 as **Co-Chairman**

3. i-touch Robotic Arm workshop conducted by Technophilia Systems in association with

Robotics Academy of USA on 17th and 18th Feb, 2012 as a *Convenor*

4. Webinar on "Overview of Machine Learning", VNRVJIET as a **Resource Person**, 4th June,
2020.

5. Sustainable Thermal and Fluidics Track, AICTE sponsored International E-Conference SDME
2020, as a **Co-Chair** 30-31st, Oct, 2020.

6. Talk on 'Career Opportunities for Mechanical Engineers', Induction Programme for UG
Students as a **Resource Person**, 4th Dec, 2020.

4.2 Attended:

1. Training Programme (3 months) in **Visual C++ by** Kernex Microsystems (India) Pvt. Ltd., Hyderabad.

2. Short Term Training Programme on Curriculum Development & Course Design, Teaching Methodology, Learning Assessment Policy & Strategies by Ethiopian Civil Service College, Ethiopia from July 24 to 29,2006.

3. National level Seminar on CAD /CAM at VJIT, Hyderabad, March, 2011 as a **participant.**
4. AICTE sponsored staff development programme on "**Advanced Data Mining Techniques**" organised by VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad from 14th-26th May, 2012 as a participant.

3.HOD& Faculty Orientation Programme for **JNTUH e-Learning Solutions and Two-Way HD Delivery Mechanism for Teachers & Students (eLSDM)** conducted by Globarena Technologies Pvt. Ltd held at JBREC,Aug,2014 as participant.

4. Faculty Development Programme on Teaching-Learning process organised by G.N.I.T.C, 2014 as participant.

5. Faculty Development Programme on Soft skills and Effective Communication organised by G.N.I.T.C as a participant. 2015

6. Wiksate Training Programme to connect peers, faculty, students on social learning platform as a participant, 2015

7. A National Level Hands-On Workshop on Accreditation – Quality Enhancement through Outcome Based Engineering Education, November 6th -7th, 2015 as participant.

8. 2016 Mind Education Specialist Training Program by International Mind Education Institute on   4th March, 2016.

9. IGNITE 2016 organised by Guru Nanak Institutions Technical Campus & Guru Nanak Institute of Technology on 2nd April, 2016 as a **Judge** in paper presentation event.

10. Talk on indexing of Journals, Nov, 2016 as a participant at VNRVJIET.

11. Seminar on Intellectual Property Rights, Dec, 2016 as a participant at VNRVJIET.

12. POGIL training session, Dec, 2016 as a participant at VNRVJIET.

13. Advanced Numerical Modelling Techniques for Mechanical Engineering, 27th to 31st March, 2017, VNRVJIET as a participant.

14. One day workshop on 'Advanced Engineering Materials and Applications' as a participant, 31st January, 2017, VNRVJIET

15. Short Term Training Programme on Adams software, 21st to 25th, Nov, 2017, VNRVJIET as a participant.

16. Short-Term Training Programme on Engineering Drawing through AUTOCAD, December 11th to 15th 2017 as a participant.

17. Faculty Development Programme on "Computational Tools for Engineering Applications", 25th to 29th June 2018, VNRVJIET as a participant.
18. Faculty Development Programme on Mastercam and CIMCO DNC, 1st to 5th April, 2019 as a participant.

19. Faculty Summer Training Program on Machine Learning in collaboration with ACM and CDC from
    20th May to 25th May, 2019.

20. Faculty Development Program on "Development, Characterization and Analysis of Composites   (DCAC-2019)", VNRVJIET, 19th to 23rd Nov, 2019 as a participant.

21. Faculty Development Program on "Automation Studio", VNRVJIET, 24th to 28th Sep 2019 as a participant.

22. Training Program on "3D Printing Processing and Applications", VNRVJIET, 25th to 29th Nov 2019 as participant.

23. Web Seminar on "Need of the hour- wake up and Find solutions", IEEE Hyderabad Section, as a participant on 12th April, 2020.

24. A Webinar on "Research Proposal Writing", IEEE Hyderabad Section, as a participant on 14th April, 2021

25. Webinar on Deep Learning with Neural Networks organized by SKITM, 30th May, 2020.

26. In House Training on Video Content Development on 24th July, 2020 as a participant.

27. FDP on "Recent Trends in Mechanical & Industrial Engineering", VNRVJIET as a participant,
    17th – 21st Aug, 2020.

28. Online Workshop on "Application of Data for Industrial Problems through Python as a participant, 10th Aug to 27th Aug, 2020.

29. Virtual Faculty Training Programme 2020 on 'Learning by Doing on Python' as a participant

7th to 15th Dec, 2020.

30. Edu Sector Workshop by FANUC as a participant, 16th Dec, 2020.

31. 'Short Term Training Programme on Cloud based 3D EXPERIENCE –CATIA' as a participant

5th – 9th April, 2021.

32. Guest Lecture on Nano-Composite Materials as a participant on 27th May, 2021.

33. Guest Lecture on Industry 4.0/5.0 (Evolution of connected factories) as a participant in 2021.

34. IUCEE Industry Academy Collaboration Cluster Meeting as a participant, May,2022

5. **Academic Contribution and Research & Consultancy:**

5.1. Invited Lectures:

5.2. Articles / Chapters published in Books:

5.3. Books published as single author or as editor:

5.4. Projects Guided:

        a) UG: 34

        b) PG: 5

5.5. Research Interests: Machine Learning Applications, Data Mining in Manufacturing, Automation &

    Robotics, CAD/CAM

5.6. Ph.D students :

        a) Enrolled :

        b) Submitted :

        c) Awarded :

5.7. Papers published in reviewed journals:

S. No	Title of the Paper	Journal Name Vol. No. PP	ISBN/ISSN No.	Impact Factor/ Citation Index	National/ International

1	Integration of Control Charts and Data Mining for Process Control and Quality Improvement	International Journal of Advances in Engineering & Technology, Vol.2, 640-648, 2012	2231-1963	Citations: 6	International
2	Data Mining Based Knowledge Discovery for Quality Prediction and Control of Extrusion Blow Molding process	International Journal of Advances in Engineering & Technology, Vol.6, 703-713, 2013	2231-1963	Citations: 8	International
3	Data Mining For Knowledge Discovery and Quality Improvement of TMT Bar Re-Rolling Process	International Journal of Mechanical Engineering and Technology, Vol.4, 281-288, 2013	0976-6359	Citations: 2	International
4	Optimization Of Shot Peening Process Parameters Using Taguchi Approach And Validation By Data Mining	International Journal of Engineering Science and Technology, Vol.5, 1471-1475, 2013	0975-5462	Citations: 4	International
5	Data Mining Approach For Quality Prediction Of Injection Molding Process Through Statistica SVM, KNN and GC & RT Techniques	International Journal of Mechanical Engineering and Technology, Vol:7, PP22-30, 2016	0976-6359	Citations: 7	International

6	Data Mining Approach For Quality Prediction And Improvement Of Injection Molding Process Through SANN, GCHAID and Association Rules	International Journal of Mechanical Engineering and Technology, Vol: 7, PP31-40, 2016	0976-6359	Citations: 8	International
7	Data mining Approach for Quality Prediction and Fault Diagnosis of Injection Molding Process	Indian Journal of Science and Technology, Vol:10 (17),DOI: 10.17485/ijst/2017/v10i17/112 580, 2017	0974-5645	Citations: 1	International
8	Data Mining Approach for Quality Prediction and Control of Injection Molding Process	Indian Journal of Science and Technology, Vol:10 (20),DOI: 10.17485/ijst/2017/v10i20/112 632, 2017	0974-5645		International
9	Data Mining Approach for Quality Prediction and Improvement of Injection Molding Process	International Journal of Engineering and Technology, Vol. 9 (3), Jun-Jul 2017, PP2119-2129, 2017	0975-4024		International
10	Data Mining Based Approach for Quality Prediction of Injection Molding Process	International Journal of Engineering and Technology, Vol. 9 (3), Jun-Jul 2017, PP2220-2224, 2017	0975-4024		International

11	Computer Assisted Job Sequencing	International Journal of Engineering Science and Technology , Vol.10, Issue 3, PP141-145,2018	0975-5462		International
12	Computer Aided Line Balancing	International Journal of Engineering Science and Technology , Vol.10, Issue 3, PP146-151,2018	0975-5462		International
13	Development of Prototype Automated Storage System	International Journal for Research in Engineering Application & Management (IJREAM), Vol-04, Issue-02, PP236-238,May, 2018	2454-9150		International
14	Computer supported Equipment Replacement Management	International Journal for Research in Engineering Application & Management, Vol:04, Issue 3 PP110-113,June,2018	2454-9150		International
15	Computer Supported Replacement Management Considering Money Value	International Journal for Research in Engineering Application & Management, Vol:04, Issue 4,PP172-175,July,2018	2454-9150		International
16	Predictive Modelling for Quality Prediction and Assurance of Extrusion Blow Molding	International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume-8,Issue-11, September,2019	2278-3075		International
17	Machine Learning Approach for Surface Defects Identification of Shielded Metal Arc Welding	International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), Vol. 10, Issue 3, PP 8415-8424, Jun ,2020	2249-8001		International

S.No					
18	Predictive Modeling For Quality Assurance Of Extrusion Blow Molding	International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), Vol. 10, Issue 3, Jun 2020, PP8315–8322	2249-8001		International

5.8. Papers presented at National / International Conferences:

S.No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	Data Mining Based Knowledge Extraction for Quality Control of Injection Molding Process	Proceedings of National Conference on Advances in Mechanical Engineering & Renewable Energy	National	25-26th March 2013
2	Data Mining for Process Control and Quality Improvement: A Review	Proceedings of National Conference on Recent Trends in Mechanical Engineering	National	18th October, 2012
3	Data Mining Approach for Improving Quality of Upsetting Process in Engine Valve Manufacturing	Proceedings of International Conference on Innovations in Design and manufacturing	International	10-11, January 2014.

5.9. Sponsored research Projects:

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed
1	Comparative study of Data Mining Tools for Knowledge Extraction, Process Control and Quality Improvement of Injection molding	UGC	2 years	Rs.2,40,000/-	**Completed**

5.10 Consultancy Projects: N/A

S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed