

# VNR VIGNANA JYOTHI INSTITUTE OF ENGINEERING & TECHNOLOGY

## KNOWLEDGE ASSET 2022-23



**Name:** Dr. P.Venkateswara Rao

**Designation:** Assistant Professor

**Department:** Computer Science and Engineering

**Mail.I.D:** venkateswararao\_p@vnrvjiet.in

**Experience (in years): Teaching: 16 Research: 4 Others (If any, Specify): 1(Industry)**

### 1. Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1.	B.Tech	2004	CSE
2.	M.Tech	2010	SE
3.	Ph.D	2022	CSE

### 2. Teaching and Learning:

#### 2.1. Teaching Interests:

R Programming, Data Science using Python, Machine Learning, Artificial Intelligence, Advanced Algorithms, Web Technologies, Data Analytics, Machine Learning and IOT, Linux Programming, Formal Languages and Automata Theory, Compiler Design, Mathematical Foundations of Computer Science, Advanced Data Structures, C Programming and Data Structures, Object Oriented Programming through Java, Computer Organization, Operating Systems, Database Management Systems, Web Technologies, Data Warehousing and Data Mining, Software Testing Techniques, UNIX Operating System, Computer Networks, Network Security, Artificial Neural Networks, Neural Networks and Fuzzy Logic.

#### 2.2. Novel Teaching & Learning Techniques adopted:

- Learning by Doing
- POGIL
- Role Play
- Concept Maps
- Mind Maps

#### 2.3. Involvement in curriculum updating / Design:

Verified and Updated R19 UG CSE Data Science Specialization course curriculum and committed syllabus for two years. Verified and updated R18 PG curriculum for the subjects Advanced Data Structures, Advanced Data Structures Lab, Advanced Algorithms, Advanced Algorithms Lab and Research Methodology and Intellectual Property Rights.

### **3. Co-curricular and Extra-Curricular Activities**

#### 3.1. Interests and Hobbies:

- To promote work efficiency, good attitude towards work in organizations.
- Interested in playing caroms and cricket.

#### 3.2. CCA/ECA Organized:

- Coordinated for R&D show case visit @ IIIT, Hyderabad.
- Coordinated for Tech Mahindra campus visit for IEEE seminar, Hyderabad.
- Coordinated for Industrial visit TCS Campus, Hyderabad.
- Coordinated for Industrial visit Infosys campus, Hyderabad.
- Coordinated for Industrial visit CMC campus, Hyderabad.
- Coordinated for Industrial visit Infosys Campus, Bangalore.
- Coordinated for Industrial visit TCS Campus, Pune.

#### 3.3. CCA/ECA participated:

- Actively participated in Sintilationz and Convergence every Year

#### 3.4. Counseling and Mentoring Activity:

- Counseling is a continuous activity during my employment and claimed successful results in many normal and abnormal cases
- A member of various committees such as Anti Ragging Committee, NSS Advisory Committee, Examination Monitoring Committee

#### 3.5. Committees involved in:

Department level:

- B.Tech CSE-Data Science Co-Ordinator
- TCS Internship SPOC and Internship In charge
- Show and Tell Coordinator
- Project Coordinator
- Floor In charge
- Disciplinary Action Committee.

- Anti Ragging Committee,
- NSS Advisory Committee

#### Institute Level:

- B.Tech CSE-Data Science Co-Ordinator
- TCS Remote Internship SPOC
- TASK Coordinator
- M.Tech CSE Coordinator
- Disciplinary Action Committee.
- Placement Coordinator
- I B.Tech Class Room Coordinator

#### **4. Conference / Workshop / Seminar / Guest Lectures:**

##### 4.1 Conducted:

- Conducted Two one day workshops on Agile Methodology by TCS experts for final year TCS selected students during 2020-21 in the month of January.
- Conducted Five Day workshop on Art of Teaching for I year PG and UG Students under AICTE-SPDP.
- Conducted Three Day workshop on Java Programming for II-year Students under AICTE-SPDP.
- Conducted Two one day workshops on Agile Methodology by TCS experts for final year TCS selected students during 2019-20 in the month of January.
- Conducted Three Day Workshop on Data Science Applications using advanced python, Machine Learning and Deep Learning during 2019-20 for III year Students from 6th to 8th January 2020 by GeekL Technologies.
- Conducted a Three-day Boot Camp on “WEB & Mobile App Development with Angular” during 2019-20 from 7th -10th August 2019 for III B.Tech CSE students.
- Conducted One Day Project Expo on “TCS Remote Project Internships of Manufacturing wing” during 2018-19 for TCS selected final year students.
- Conducted Five One Day Workshops on “TCS Remote Project Internships” during 2018-19 project period for final years.
- Conducted One Day Workshop on “Artificial Intelligence and Machine Learning” during 2018-19 for MTech SE and CSE and students.
- Conducted One Day Workshop on “Software Life cycle and UML diagrams” during 2018-19 for MTech SE and CSE and students.
- Conducted Two Day workshop on “Cognitive Science and Virtual Reality” during Convergence 2017-18.

- Conducted Three Two Day Workshops on “TCS Remote Project Internships” during 2017-18 project period for final years.
- Conducted One Day Seminar on “Agile Methodology” for M.Tech and B.Tech Students.
- Conducted Three Day FDP on “Big Data, IOT, Docker Containers” for TCS Remote Internship projects during 2017-18 academic year.
- Conducted Three Two Day workshops on “TCS Remote Project Internships” during 2016-17 project period for final years
- Conducted Two Day FDP on “IOT, Containers and LTE” at TCS Campus, Hyderabad(2016-17)
- Conducted Three Two Day workshops on “TCS Remote Project Internships” during 2015-16 project period for final years.
- Conducted Guest Lecture on “Hybrid Mobile Application Development” at VNR VJIET for II year Students
- Conducted Two Day FDP on “Recent Technologies in Industry” at TCS Campus, Hyderabad (2015-16).
- Conducted Two Day National workshop on “Compiler Construction Tools” at VNR VJIET.
- Conducted Three Day International Conference **InDaS-2014**.
- Conducted Two Day National workshop on **A Practical Approach to Compiler Design**
- Conducted One Day Seminar on **BOSS** by CDAC Team
- National Conference on Data Mining.
- National Conference on Cloud Computing.
- National Conference on Emerging Trends in Information Technology

#### 4.2 Attended:

- Attended one week Online FDP on “Nuts and Bolts of Machine Learning “ organized by IARE College, Hyderabad.
- Attended One Week Online FDP on “Artificial Intelligence” organized by Department of Computer Science & Engineering, St. Peter’s Engineering College, Hyderabad.
- Attended One Week Online FDP on “Disruptive Technology” organized by BVRIT College for Women, Hyderabad, CSE and IT Department in collaboration with Brain O Vision.
- Attended One Week Online FDP on “Linux Foundation and Implementation of Data Structures” organized by CSE Department, VNR VJIET.
- Attended Two Week Online FDP on “Advanced Data Structures Implementation” organized by CSE Department, VNR VJIET.
- Achieved **Distinction** for Applied Machine Learning, a part of your PGDMLAI program, final grade for Applied Machine Learning course is 10 out of 10 and your Grade Point Average (GPA) is 10 out of 10 organized by Emeritus Singapore in collaboration with Columbia University New York.

- Completed NPTEL Online Certification Course on “Python for Data Science” with Elite Certificate.
- Completed NPTEL Online Certification Course on “Applied Natural Language Processing” with Elite Certificate.
- Completed Coursera Online Certification Course on “Applied Text Mining Using Python” with Certificate.
- Attended One Week FDP on “**Machine Learning using python**” at Vasavi Engineering College, organized by NIT Warangal.
- Attended Two Week FDP on “Research Methodology and Intellectual Property Rights” at JNTUA Ananthapuramu.
- Attended Two Week FDP on “Data Structures and Algorithms” at JNTUA Ananthapuramu.
- Attended Two Week FDP on “Data Mining” at JNTUA Ananthapuramu.
- Attended One Week “Supervisor Interaction Program” at JNTUA Ananthapuramu.
- Completed NPTEL Online Certification Course on “Programming, Data Structures and Algorithms using Python” with Elite Certificate.
- Completed NPTEL Online Certification Course on “Introduction to Data Analytics” with Elite Certificate.
- Attended Three Day Workshop on “Big Data Tools and Technologies” at VNR VJIET organized by Asura Technologies.
- Attended One Week FDP on “**Sensor Networks and Internet of Things**” at VNR VJIET organized by NIT Warangal.
- Attended One Week FDP on “**Data Analytics with R**” at VNR VJIET organized by NIT Warangal.
- Attended Two Day Workshop on **Research Methodology** at BITS Pilani, Hyderabad campus
- Attended Three Day Workshop on **Data Driven Project Design** at VNR VJIET, Hyderabad
- Attended Six Week Workshop on **JNTUH-EXCITE Summer Product Engineering** at JNUTH, Hyderabad
- Attended Three Day Workshop on **Recent Trends in Image & Video Processing** at VNR VJIET, Hyderabad
- Attended Three Day Workshop on **Emerging Trends in Social Media and Mobile Applications** at VNR VJIET, Hyderabad
- Attended Three Day Workshop on **Big Data Analytics & Cloud Computing** at VNR VJIET, Hyderabad
- Attended Three Day Workshop on Engineering the **Education Scenario towards a Learner Centric Environment** at VNR VJIET, Hyderabad
- Attended One Week Workshop on **English Proficiency** at VNR VJIET, Hyderabad
- Attended International Conference ICACECS-2020 at VNR VJIET, Hyderabad.

- Attended International Conference **InDaS-2014** at VNR VJIET, Hyderabad
- Attended Three day workshop on **Art of Teaching** at VJIM, Hyderabad
- Attended one day seminar on **POGIL** at VJIM, Hyderabad
- Attended one day seminar on **Research Publications and Documentation** at VNR VJIET, Hyderabad
- Attended Two Day workshop on **Art of Teaching** at VNR VJIET, Hyderabad.
- Attended workshop on **Entrepreneurship** at VNR VJIET Hyderabad.
- Attended workshop on **Software Testing Methodologies with Tools** at Sri Nidhi Institute of Science and Technology, Hyderabad.
- Attended workshop on **Network Programming** at GNITS Hyderabad.
- Attended workshop on **Embedded Systems** at Osmania University, Hyderabad.
- Attended workshop on **Embedded Systems** at Sri Nidhi Institute of Science and Technology, Hyderabad.
- Attended Dale Carnegie's **Teacher Training Program** Organized by Wipro Mission 10X at Sri Indu Engineering College, Hyderabad.
- Attended workshop on **Middleware Technologies** at Sri Nidhi Institute of Science and Technology, Hyderabad.

## 5. Academic Contribution and Research & Consultancy:

### 5.1. Invited Lectures: --

- Acted as a Resource person for Pre Conference workshop on Artificial Intelligence and Machine Learning in ICACECS-2020 Organized at VNR VJIET sponsored by AICTE.
- Acted as a Resource Person for One Week Faculty Training Program on “Learning and Doing by Python” organized by Competency Development Centre, VNR VJIET, Hyderabad, Telangana, from 18<sup>th</sup> November to 23<sup>rd</sup> November 2019.
- Acted as a Resource Person for One Week online Faculty Development Program on “Python for Machine Learning” organized by CSE Department in collaboration with CSI, VNR VJIET, Hyderabad, Telangana, from 18<sup>th</sup> May to 23<sup>rd</sup> May 2020.
- Acted as a Resource Person for Two Week online Faculty Development Program on “Advanced Data Structures” organized by CSE Department in collaboration with CSI, VNR VJIET, Hyderabad, Telangana, from 01<sup>st</sup> June to 15<sup>th</sup> June 2020.

### 5.2. Articles / Chapters published in Books: --

### 5.3. Books published as single author or as editor: --

### 5.4. Projects Guided:

a) UG:

- Road Traffic Analysis using SVM Classification methods
- OTT Platform Recommendation using Natural Language Techniques
- IOT BASED BIOMETRICS AND VERIFYING IT USING FACIAL RECOGNITION FOR OPENING DOOR
- Image Deblurring using generative adversarial Neural Networks(GAN)
- NLP-Text Summarization
- Questions Generator for Cognitive Bot Evaluation
- Vehicle ChatBot Application using AI (TCS Manufacturing Project)
- Quora Question Pairs:Identify Question Pairs That Have Same Intent (TCS TBU Project)
- Semantic Search using approximate methodology for storage systems.
- Web based Student Evaluation
- Client Server interaction using docker containers (tcs project)
- Social Media Trend Analysis
- Supporting Privacy Protection in Personalized Web Search
- SYNTAX HIGHLIGHTING AND USER FRIENDLY ERROR MESSAGES
- Character recognition using artificial neural networks
- Cloud computing for agent-based urban transportation system
- Android phone backup to Google Account
- Development of an online course portal for a campus
- Widespread catalog
- Staying Connected in a mobile health care system experience from the MediNet
- An Extended Visual Cryptography Scheme.
- Time Table Management System
- Data Mining Technologies and its possible applications in city planning
- Towards secure and dependable storage services in cloud computing
- Business Excellence Practice

b) PG:

- Abstractive Text Summarization using Deep Learning Approaches
- Automatic Image Captioning system for images using Machine Learning approach.
- Detection of duplicate questions in online community forums using Machine Learning Approaches.
- Hybrid testing tool: concolic's automatic test suite generation and quality assessment of test suites using mutation testing
- Intimate Web Reversion By Context And Content Keywords With potential Feedback

- Improvement of online CQA to classify the quality of questions using PCA and SVM.
- A Scalable Two-Phase Top-Down Specialization Approach for Data Anonymization using MapReduce
- Reverse nearest neighbor in unsupervised distance based outlier detection
- Development of Reporting App for water quality and quantity monitoring - an Android application
- Location based spatial queries in wireless broadcast networks

5.5. Research Interests:

Machine Learning and Natural Language Processing, Image Processing

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.	A Comprehensive Retrospection of Literature Reported Works of Community Question Answering	International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume-9 Issue-3, January 2020	ISSN: 2278-3075	5.5	International

	Systems				
2	Automatic JUnit Generation and Quality Assessment using Concolic and Mutation Testing	'International Journal of Innovative Technology and Exploring Engineering (IJITEE)', Volume-8 Issue-10, August 2019, Page No.: 2843-2851.	ISSN: 2278–3075	5.5	International
3	Intimate Web Reversion Based on Framework in addition Gratified Keywords through Potential Criticism	International Journal of Computer Sciences and Engineering(IJCSE) (July 2018) Volume 6, Issue 1.	ISSN 2347-2693		International
4	An Effective Specialization Approach for Data Anonymization Using Map Reduce on Cloud	International Journal & Magazine of Engineering, Technology, Management and Research(IJMETMR)(2016) Volume3, Issue 11,	ISSN 2348-4845		International
5	Performance Issues on K-Mean Partitioning Clustering Algorithm	International Journal of Computer (IJC) (2014) Volume 14, No 1, pp 41-51	ISSN 2307-4531		International

6	Analysis and Usage of Fuzzy Logic for Optimized Evaluation of Database Queries	International Journal of Computer Applications(Volume 16– No.3, February 2011)	ISSN 0975 – 8887		International
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5.8. Papers presented at National / International Journals:

S.No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	A Method to Find Optimum Number of Clusters Based on Fuzzy Silhouette on Dynamic Data Set	Elsevier(ICICI-2014)	International	
2				

5.9. Sponsored research Projects:

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed
1	SPDP-Skill and Personality Development Programme Centre for SC/ST Students	AICTE	3 years	25 Lacks	<b>Provisionally Approved by AICTE.</b>

5.10 Consultancy Projects:

<b>S.No</b>	<b>Title</b>	<b>Agency</b>	<b>Period</b>	<b>Sanctioned Amount</b>	<b>Ongoing / Completed</b>
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#### **6. Awards / Honors received:**

- Completed PG Diploma Certificate Course on Artificial Intelligence and Machine Learning Offered by Emeritus in association with Colombia University.
- Certified Application Developer conducted by ServiceNow
- Qualified in NET-2012 conducted by UGC
- Qualified in APSET-2012 conducted by Osmania University
- Qualified in FET-2011 Conducted by JNTUH.
- Got 54<sup>th</sup> rank in PGCET-2008.
- Qualified in GATE-2007.

#### **7. Motto:**

To impart QUALITY & INNOVATION in Technical Education, to enable the students to become LEADERS and ENTREPRENEURS in the IT industry