2 **Department of** Computer **Science & Engineering TECH TIMES A Half- Yearly Newsletter**

June 2022

"The computer was born to solve problems that did not exist before." - Bill Gates

> **PRASAD V. POTLURI SIDDHARTHA INSTITUTE OF TECHNOLOGY**

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Contents

Guest Lectures / Workshops Organized Faculty Achievements Faculty Publications/ Conferences Workshops Attended by Faculty Students Achievements Student Articles

Department of Computer Science & Engineering

The Department of Computer Science and Engineering was formed in the year 1999. The department has started B.Tech program with an initial intake of 40 in the year 1999 and 120 from 2007 onwards. The department has also started M.Tech program with an initial intake of 18 in the year 2006, and an increase in the intake to 36 in the year 2011. The department is accredited by NBA in the year 2007 for a period of 3 years and was reaccredited in the year 2012 for a period of 2 years. In 2019 department was accredited for a period of 3 years.

> The department has 37 qualified teaching staff with 11 PhDs and 26 M.Techs. Our faculty members aim at delivering top class education blending their rich research experience with class room teaching. The entire faculty is involved in research activities and has published/presented papers in national and international journals and conferences.

> The department has ACM student chapter and CSI student chapter. The department offers various certification training programs to students like APSSDC Mobile App Development Program to make the students well prepared to face the industry. The department has also established Intel FICE Lab to encourage students with new technologies.

Guest Lectures / Workshops / Co-curricular events organized by Department

1. The department of Computer Science and Engineering organized ---

i. A webinar as a part of Industry Institute Interaction on "Soft Computing-IT Industry Perspective"

for III CSE students on 28-3-2022.



Fig.1: A webinar on "Soft Computing-IT Industry Perspective" for III CSE students.

ii. A webinar as a part of Industry Institute Interaction on "Machine Learning and Statistics" for III CSE students on 28-3-2022.



Fig.2: A webinar on "Machine Learning and Statistics" for III CSE students.

iii. A webinar as a part of Industry Institute Interaction on "E-Commerce and Revenue Generation Using Recommendation Systems" for IV CSE students on 28-3-2022.



Fig.3: A webinar on "E-Commerce and Revenue Generation Using Recommendation Systems" for IV CSE students on 28-3-2022

iv. A webinar for faculty on "Approaches for writing Proposals for Funding Schemes" on 29-03-2022.Coordinator: Dr. K. Koteswara Rao, Associate Professor.

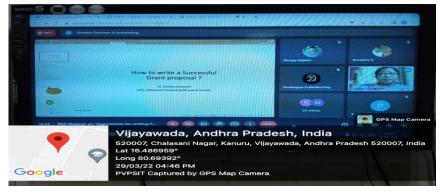


Fig.4: A webinar for faculty on "Approaches for writing Proposals for Funding Schemes" on 29-03-2022.

- v. A webinar for faculty on "Approaches for writing and publishing quality research papers" on 2-03-2022.Coordinator: Dr. K. Koteswara Rao, Associate Professor.
- vi. A webinar as a part of Industry Institute Interaction on "Security in Software DevelopmentLife Cycle" for III CSE students on 31-3-2022.
- vii. SITAR-2K22 Technofest conducted "Tech Idea Presentation" event on 25-3-2022. A total of 31 participants registered in the event. Dr. T. Kameswara Rao Professor, Dept. of CSE, from VVIT Guntur (Institute) acted as honorable judge. Event Coordinator(s): 1. Dr .J. Rama Devi, Sr.Asst. Professor. 2. Ms .D. Swapna, Asst. Professor.

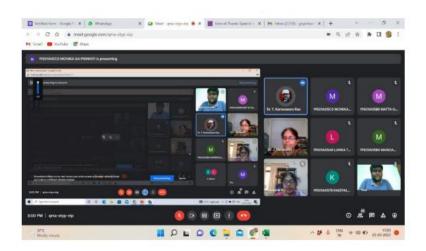


Fig.5: SITAR-2K22 "Tech Idea Presentation" Event

viii. SITAR-2K22 Technofest conducted "Tech JAM" event on 25-3-2022. A total of 57 participants have registered in the event. Dr. N. Rajeswari, from Gudlavalleru Engineering College acted as honorable judge. Event Coordinator(s): 1. Ms.A.Divya, Asst. Professor. 2. Mr.Y.Ayyappa, Asst. Professor.



Fig.6: SITAR-2K22 "Tech JAM Presentation" Event

ix. A Guest Lecture on "Being Industry Ready: Journey from Campus to IOT World" in association with PVPSIT ACM Student chapter on 10-5-2022. Resource Person: Dr. V. Sunil Kumar, Director-Data Science, Ericsson GAIA-Bangalore.



Fig.7: A Guest Lecture on "Being Industry Ready: Journey from Campus to IOT World" in association with PVPSIT ACM Student chapter on 10-5-2022 by Dr. V. Sunil Kumar ,Director-Data Science

x. "Cultural Fest-2022" for II CSE and III CSE students on 24.05.2022.



Fig.8: "Cultural Fest-2022" for II CSE and III CSE students on 24.05.20222.

Faculty Achievements

a. Patents:

- **i.** Mr.D.Lokesh Sai Kumar published a patent "Cultivation of Agricultural data using IOT" with Application No.: 202241000094A on 12-03-2022.
- Mr. S. Krishna Kishore published a patent "Automated Inspection of Transmission Lines/Cell Tower using Virtual Reality" with Application No.: 202241013632A on 12-03-2022.
- iii. Ms. T. Sri Lakshmi, Dr. Lakshmi Ramani B, Mr.B.Vinay Kumar published a patent"A Device and System to Exclusively Transact Data between Pluralities of Data Storage Devices" with Application No: 202241026397A on 20-05-2022.
- iv. Dr. S.Madhavi published a patent "A method of diagnosing disease using quantum enhanced machine learning models" with Application No. 202241030972A on 30-05-2022.
- v. Dr. Lakshmi Ramani B, Ms. T. Sri Lakshmi, Mr.B.Vinay Kumar published a patent"An Artificial Intelligence Based Medical Procedure Assessment and Intervention System and Method Thereof" with Application No: 202241027925A on 17-06-2022.

b. Guest lecturers delivered:

i. G. Lalitha Kumari delivered a talk on "An insight into Research Perspectives" on 30-4-22 as a part of one week FDP organised by Department of CSE, Vijaya Institute of Technology from 25-4-22 to 30-4-22.



Fig: Dr. G. Lalitha Kumari delivered a talk on "An insight into Research Perspectives" in Vijaya Institute of Technology

c. Reviewers of journals:

- Dr. S. Phani Praveen acted as reviewer for "International Conference on Advances in Computer Engineering & Communication Technology ICACET-2021 organised by Department of IT, CSE & ECE, Aditya College of Engineering & Technology, Surampalem.
- ii. Dr. S. Phani Praveen acted as reviewer for The Journal of Supercomputing.
- Dr. S. Phani Praveen acted as reviewer for Principles and Methods of Explainable Artificial Intelligence in Healthcare.

d. Faculty Participation (as a Judge, Guest, or BOS member, & Chairing a session, etc.):

 Dr. A. Jaya Lakshmi, appointed as Subject expert for conducting JNTUK Assistant Professor Ratification interviews on 19-3-2022 at PSCMR College of Engineering & Technology, Vijayawada.

e. Ph.Ds awarded :

- i. Ms.M. Sailaja received doctoral degree from Acharya Nagarjuna University on the topic "An Ensemble Distributed Search Approach with Parallel Processing Framework for Frequent Subgraphs".
- Mr. K. Vijay Kumar received Doctoral Degree from VIT AP for his work on "Privacy Preserving Human Activity Recognition uses Machine Learning Algorithms" on 4-6-2022.

f. Projects applied for external agencies: NIL

g. Awards:

- Dr. J. Rama Devi received "Best Project Award" for the project titled Change Detection in Vegetation Cover using Satellite image" in NGP-DST 21 Days Summer School on Geospatial Science & Technologies (Level 1) conducted from 13th June to 3d July, 2022 by V. R. Siddhartha Engineering College (Autonomous), Vijayawada and supported by National Geospatial Program (NGP) - Department of Science and Technology, Government of India, New Delhi.
- Mr. K. Vijay Kumar awarded with "Research Award- Publications (Engineering & Advanced Sciences) from VIT-AP University for the Academic Year 2021-22.
- iii. Ms. Y. Surekha has received appreciation award as Active SPOC from SWAYAM- NPTEL Local Chapter for her instrumental role for the period of Jan-Apr 2022.

Faculty Publications/ Conferences

a) SCI/SCIE/ESCI / Scopus indexed journals:

- Dr.B.Janakiramaiah published a paper "Hyper parameter Optimization for Transfer Learning of VGG16 for Disease Identification in Corn Leaves Using Bayesian Optimization in Big Data", ISSN: 2167-647X. (SCIE Indexed)
- ii. Dr.B.Janakiramaiah published a paper "Intelligent system for leaf disease detection using capsule networks for horticulture" in Journal of Intelligent & Fuzzy Systems", Vol-41, Issue-6, ISSN:1857-8967 (SCIE Indexed)
- Ms.A.Madhuri, Dr.S.Phani Praveen and Mr.D.Lokesh Sai Kumar published a paper "A New Multi-Level Semi-Supervised Learning Approach for Network Intrusion Detection System Based on the 'GOA' in Journal of Interconnection Networks, ISSN:1793-6713 (Scopus Indexed)
- iv. Dr.J.Rama Devi published a paper "Evaluation of estimation in software development using deep learning-modified neural network" in Applied Nanoscience, Springer Nature, February 2022 with ISSN: 2190-5517.(SCIE Indexed)
- v. Dr.S.Phani Praveen published a paper "Ambient Assistive Living for Monitoring the Physical Activity of Diabetic Adults through Body Area Networks, Vol:2022, April-2022, ISSN:1875-905X (SCIE Indexed)

- vi. Dr.S.Madhavi published a paper "A Reinforcement Learning Model for Quantum Network Data Aggregation and Analysis", in Journal of System and Management Sciences, Volume 12, Issue 1, April 2022, ISSN:1816-6075.
- vii. Dr.B.Lakshmi Ramani presented and published a paper "DPMLT: Diabetes Prediction Using Machine Learning Techniques" in 2022 International Conference on Electronics and Renewable Systems (ICEARS), 16-18 March, 2022, with ISBN:9781-6658-8425-1. (Scopus Indexed)
- viii. Dr.B.Lakshmi Ramani presented and published a paper "Comparative Analysis of Consumer Loan Approval Prediction using Machine Learning Algorithms" in 2022 International Conference on Artificial Intelligence and Smart Energy (ICAIS), 23-25 Febuary, 2022, with ISBN:9781-6654-0053-4. (Scopus Indexed)

b) UGC/other journals:

- Dr.K.Koteswararao published a paper "Optimal Test Case Generation using G-Genetic Algorithm Variant – Proposed Method" in Stochastic Modeling & Applications, Volume 25, Issue-8, ISSN:0972-3641 (UGC)
- ii. Dr.J.Ramadevi published a paper "Conditional Density Based Statistical Prediction" in Stochastic Modeling & Applications, Volume 26, Issue 3, March 2022, ISSN:0972-3641 (UGC)
- Ms.D.Swapna published a paper "Blockchain Oriented hyperledger based performance driven framework for mass e-voting", in Intelligent Decision Technologies, Volume 15, Issue 4, January 21, ISSN:1872-4981.
- iv. Mr.K.Vijay Kumar has published a paper "Efficient human activity recognition with privacy solving the public and private activities of videos and images via deep learning", in Advances and Applications in Mathematical Sciences, Volume 21, Issue 1 ISSN:0974-6803 (UGC)
- v. Ms.D.Sree Lakshmi and Ms.A.Divya published a paper" Performance of Heterogeneous Ensemble Approach with Traditional Methods based on Software Defect Detection Model" in Journal of Theoretical and Applied Information Technology, Volume 100, Issue 4, ISSN:1817-3195
- vi. Mr.D.Lokesh Sai Kumar a paper "Efficient way to apply the data mining primitives in real world applications Effectively" in Stochastic Modeling & Applications, Volume 26 and Issue 3,March 2022, ISSN:0972-3641 (UGC)

- vii. Mr.A.Yuva Krishna published a paper "Efficient way to measure the oxygen level in water using IOT Devices" in Stochastic Modeling & Applications, Volume 26 and Issue 3,March 2022, ISSN:0972-3641 (UGC)
- viii. Ms,M.Sailaja published a paper "Understanding the Implement and Potential of Cloud Computing for Scientific Applications", in International Journal of Early Childhood Special Education, Volume 14, Issue 3, March 2022, with ISSN:1308-5581.
 - ix. Ms.A.Divya and Ms.D.Sree Lakshmi published a paper "Research Perspectives of Model Based Software Testing", in Stochastic Modeling & Applications, Volume 26, Issue 3, May 2022, with ISSN: 0972-3641.

Others:

SCIE: 3

- Ms.A.Ramana Lakshmi published a paper "Monitoring system of agriculturalperformance based on multi-sensor data and cross-validation technique in merging temporal images" in Agronomy Journal, Vol-100, No-8 with ISSN:1435-0645 (SCIE)
- Dr.J.Rama Devi published a paper "Evaluation of estimation in software development using deep learning-modified neural network" in Applied Nanoscience, Springer Nature, ISSN: 2190-5517.(SCIE) (Article in Press)
- iii. Dr.N.V.Ramana Gupta published a paper "An effective text compression-encryptionusing tight and indirect encryptions", in Soft Computing, ISSN:1433-7479 (SCIE)(Article in Press)

SCOPUS: 1

- Ms.A.Madhuri, Dr.S.Phani Praveen and D.Lokesh Sai Kumar published a paper "A New Multi-Level Semi-Supervised Learning Approach for Network Intrusion Detection System Based on the 'GOA' in Journal of Interconnection Networks, ISSN:1793-6713(SCOPUS) (Article in Press)
- c) Book chapters: NIL
- d) Conferences:
 - Ms.A.Ramana Lakshmi presented and published a paper "The Analysis on Application of IOT In Biomedical Instrumentation" in ECS Transactions, Volume 107, Issue 1.
 - ii. Dr.B.N.Swamy published and presented a paper "Multiclass Classification for Large Medical Data using Adaptive Random Forest and Improved Feature Selection Methods", in International

Conference on Confluence The Next Generation Information Technology Summit, 27-28 January, 2022. (IEEE)

- iii. Dr.J.Ramadevi presented and published a paper "Machine Learning Techniques for the Energy and Performance Improvement in Network-on-Chip(NoC)" in 4th International Conference on Computing and Communication Technologies in Chennai, India (Scopus Indexed)
- iv. Dr.B.Lakshmi Ramani presented and published a paper "DPMLT: Diabetes Prediction Using Machine Learning Techniques" in 2022 International Conference on Electronics and Renewable Systems (ICEARS), 16-18 March, 2022, with ISBN:9781-6658-8425-1. (Scopus Indexed)
- v. Dr.B.Lakshmi Ramani presented and published a paper "Comparative Analysis of Consumer Loan Approval Prediction using Machine Learning Algorithms" in 2022 International Conference on Artificial Intelligence and Smart Energy (ICAIS), 23-25 February, 2022, with ISBN: 9781-6654-0053-4. (Scopus Indexed)
- vi. Ms.D.Swapna and Dr.S.Phani Praveen presented and published a paper "Diagnosing for Liver Disease Prediction in Patients using Combined Machine Learning Models" in 4th International Conference on Smart Systems and Inventive Technology" in 20-22 Jan-2022, ISBN:978-1-6654-0118-0 (IEEE Conference)
- vii. Dr.M.Sailaja presented and published a paper "Analysis on Content Based Image Retrieval Using Image Enhancement and Deep Learning Convolutional Neural Networks" in First International Conference on Technologies for Smart Green Connected Society.
- viii. Ms.D.Sree Lakshmi and Ms.A.Divya published and presented a paper "Phishing Web Sites Features Extraction based on Machine Learning" in International Cappadocia Scientific Research Congress.
- ix. Dr.N.V.Ramana Gupta presented and published a paper "Li-Fi Enables Reliable Communication of VLT for Secured Data Exchange" in Smart Innovation, Systems and Technologies, ICISSC-2021, ISBN:978-981-19-0011 (Scopus Indexed)
- x. Dr.S.Phani Praveen and Ms.A.Madhuri presented and published a paper "A Novel Effective Framework for Medical Images Secure Storage Using Advanced Cipher Text Algorithm in Cloud Computing", at IEEE International Conference on Imaging Systems and Techniques(IST). (Scopus Indexed)

- xi. Dr.S.Phani Praveen presented and published a paper "Examination of Diabetes Mellitus For Ahead of Schedule Expectation Utilizing Ideal Highlights Determination" at 5th International Conference on I-SMAC(IoT in Social, Mobile, Analytics and Cloud) (Scopus Indexed)
- xii. Dr.S.Phani Praveen presented and published a paper "Improving Performance of IDS using Feature Selection with IG-R" at 5th International Conference on I-SMAC(IoT in Social,Mobile,Analytics and Cloud) (Scopus Indexed)
- xiii. Dr.S.Phani Praveen presented and published a paper "Smart and Multi-Way Attendance Tracking System Using An Image-Processing Technique" in 4th International Conference on Smart Systems and Inventive Technology" in 20-22 January 2022, ISBN:978-1-6654-0118-0 (IEEE Conference) (Scopus Indexed)
- xiv. Dr.S.Phani Praveen, A.Madhuri and D.Swapna presented and published a paper "Different Feature Selection Methods Performance Analysis for Intrusion Detection" in 5th International Conference on Smart Computing and Informatics ISBN: 978-981-16-9705-0 (Scopus Indexed)
- xv. Mr.B.Vishnuvardhan presented and published a paper "Further Development of Blockchain Techniques for Security and Expenses", in International Conference on Electronics and Renewable Systems, ISBN: 978-1-6654-8425-1 (Scopus Indexed)
- xvi. Mr.P.Anil Kumar and Dr.K.Koteswararao presented and published a paper "House Price Prediction using Linear Regression" in International Cappadocia Scientific Research Congress.
- xvii. Ms.A.Divya and Ms.D.Sree Lakshmi presented and published a paper "Smart Health Monitoring using IoT" in International Cappadocia Scientific Research Congress.
- xviii. Mr.S.Krishna Kishore presented and published a paper "DevOps Security and Privacy in the Development of Multicloud Applications" in 2022 International Conference on Electronics and Renewable Systems (ICEARS), ISBN: 978-1-6654-8425-1 (IEEE Conference) (Scopus Indexed)

Workshops/Faculty Development Programs attended by the faculty

a) Seminars/Webinars:

 Mr. P. Anil Kumar participated in National Webinar on "Basics of Data Analytics" oraganised by Dept. of CSE in association with IQAC, SVKP & Dr. KS Raju Arts & Science College, Penugonda on 24-5-2022.

b) Workshops:

xix. Mr S.Krishna Kishore, Mr P.Srinivasa Rao, Mr D.Chandra Sekhar, Mrs P.Anusha, Ms J.Sarvani, Mrs P.Madhavi, Mrs M.Krishna Veni, Mr V.Chaitanya Krishna, Mr V.Suresh participated in one day Workshop on "Career Counselling and skill Development" organized by VRSEC on 28-6-2022.

c) STTP/STCs:

 Mr. K. Vijay Kumar participated in Two week training programme for faculty members on AICTE student Learning Assessment- STTP-PARAKH in collaboration with Construction Industry Development Council (CIDC) from 7-2-2022 to 19-2-2022.

e) Faculty Development Programmes:

- Dr.K.Koteswararao participated & completed successfully AICTE Training and Learning (ATAL) Academy Online Advanced FDP on "Signal Processing for Cognitive Neuroscience Applications" from 17-01-2022 to 21-01-2022 at National Institute of Technology Meghalaya.
- Ms. D. Sree Lakshmi, Ms. A. Divya, Ms. M. Likhita attended online AICTE ATAL FDP on "Machine Learning & Deep learning using Python" from 04-01-2022 to 08-01-2022 organised by Pune Institute of Computer Technology, Pune.
- iii. Ms.Shrinidhi Umesh Bajpayee attended Online AICTE ATAL FDP on "Data Science with Statistical Methods using RProgramming- Basic Course" from 10-01-2022 to 14-01-2022 organised by Amity University Uttar Pradesh, Lucknow Campus.
- iv. Mr. K. Vijay Kumar attended online Faculty Development Program on "Deep Learning for Real Time Research Applications" conducted by Dept. of Computer Science & Engineering, Seshadri Rao Gudlavalleru Engineering College in association with CCE, NITW from 03-01-2022 to 07-01-2022.
- v. Mr. P. Anil Kumar attended online Faculty Development Program on "Deep Learning for Real Time Research Applications" conducted by Dept. of Computer Science & Engineering, Seshadri Rao Gudlavalleru Engineering College in association with CCE, NITW from 03-01-2022 to 07-01-2022.
- vi. Mr. B. Vinay Kumar participated and completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Rhizospheric engineering: Revisiting the Microbe-Plant Synergy to Mitigate Plant Nano Toxicology " from 24-01-2022 to 28-01-2022 at Motilal Nehru National Institute of Technology Allahabad.
- vii. Mr. V. Rajesh attended one week AICTE ATAL FDP on "Machine Learning Algorithmsfor Dead Time Systems(MLADTS)" conducted by Geethanjali College of Engineering and Technology, Cheeryal from 24-01-2022 to 29-01-2022.

- viii. Dr. G. Lalitha Kumari, Ms. Y. Surekha participated and completed successfully AICTE Training And Learning (ATAL) Academy Online Advanced FDP on "Signal Processing for Cognitive Neuroscience Applications" from 17-01-2022 to 21-01-2022 at National Institute of Technology Meghalaya.
- ix. Ms.A. Ramana lakshmi attended one week AICTE ATAL FDP on" Data Sciences" conducted by central university of Kerala from 07-02-2022 to 11-02-2022.
- x. Dr. G. Laitha Kumari, Ms. Y. Surekha attended AICTE ATAL FDP on "Robotics" from 14-02-2022 to 18-02-2022 at National Institute of Technology Nagaland.
- xi. Mrs.A. Ramana Lakshmi participated in one week ATAL FDP on "Recent Advances On Artificial Intelligence" organized by Dept.of Computer Science and Engineering,GIET University,Odisha, India from 22-2-2022 to 26-2-2022.
- xii. Mr B.Vinay Kumar and Ms Shrinidhi Umesh Bajpayee participated in NPTEL FDP on "Outcome based Pedagogic principles for effective Teaching" from 01-02-2022 to 31-03-2022.
- xiii. Ms Shrinidhi Umesh Bajpayee participated in NPTEL FDP on "Programming in JAVA" from 01-02-2022 to 31-04-2022.
- xiv. Mr B.Vinay Kumar, Ms Y.Manasa, Ms. Kirti Paliwal, Ms. P.Dedeepya, Mr A.Prasanth and Mr. P.Anil Kumar participated in one day FDP on " Inventions, Innovations and Enterpreneur arena in current indian IPR Framework" on 12-05-22 organised by Dept. of MBA, PVPSIT.
- xv. Dr N.V.Ramana Gupta participated one week Professional development programme on "Academic Leadership & Motivation" from 13-06-22 to 17-06-22 organised by NITTTR, Chennai.
- xvi. Dr G.Lalitha kumari, Mrs Y.Surekha, Mr A.Prashanth participated in in one week online FDP on"Learning Technologies" organised by NITTTR, Chennai from 13-06-22 to 17-06-22.
- xvii. Mrs D.Sree Lakshmi, Mrs P.Dedeepya participated in one week online FDP on "Boot camp-Basics of Android App Development with Kotlin" organized by L4Gand Google Developer team from 11-6-2022 to 16-6-2022.
- xviii. Dr S.Phani Praveen participated in one week FDP on "Research trends in AI,IoT & Ethical Hacking" organized by Annamacharya Instituteof Technology And Sciences,Kadapa from 6-6-2022 to 10-6-2022.

- xix. Dr S.Phani Praveen, Mr D.Lokesh Sai Kumar, Mrs D.Swapna participated in one week online FDP on "Inculcating Universal Human Values in Technical Education" organized by AICTE, New Delhi from 9-5-2022 to 13-5-2022.
- xx. Dr. J. RamaDevi successfully completed the NGP-DST 21 Days Summer School on Geospatial Science& Technologies (Level 1) conducted from 13th June to 3rd July, 2022 by V. R. Siddhartha Engineering College (Autonomous), Vijayawada and supported by National Geospatial Program (NGP)- Department of Science and Technology, Government of India, New Delhi.
- f) Guest Lectures : NIL
- g) Conferences:

h) Awareness programmes/Interaction meet/Quizzes, etc:

i. Ms. D. Swapna and Ms. D. Sree Lakshmi completed Certification program on "Learn more about the new Oracle Academy Cloud Infrastructure Foundations Curriculum" organised by Oracle Academy.

i) MOOCs courses completed by the faculty:

- i. Mr V.Rajesh completed 30-Days Certification course on" Elements of AI" organized by University of Helsinki, Finland and Reaktor on 16-01-2022 to 15-02-2022.
- Mr B.Vishnu Vardhan and Mr B.Vinay Kumar completed 30 Days training program Train the trainer program on" Full Stack Engineering" from 01-07-2022 to 31-07-2022 organised by Virtusa.
- iii. Mr. P. Anil Kumar and Mr.V.Rajesh completed NPTEL course on "Outcome Based Pedagogic Principles for Effective Teaching"

Student Achievements

Co-curricular Activities:

- II B.Tech Students participated in event "Awareness on Higher Education" organized by Department of Computer Science and Engineering in association with invicta career consultancy, P.V.P.Siddhartha Institute of Technology, Vijayawada held on 4th January, 2022.
- ii. 108 students of II B.Tech successfully completed "Introduction to python" during December 2021-January 2022 supported by Infosys Springboard Program, Infosys.

- iii. Ms.V.S.N.Himaja, Mr.S. Siddhartha, Mr.S. Krishna Kausik, Ms. U. KavyaSri participated and shortlisted in MANTHAN 2021 Grand Finale organized by AICTE under the guidance of Dr.K.Koteswara Rao, Mr.V.Rajesh.
- iv. Mr. K. Narendra of III CSE secured First place in QUIZITE event organized by, PVP Siddhartha Institute of Technology on the eve of SITAR2K22 Techno Fest 25-03-2022.
- v. Ms. K. Pujitha of III CSE secured First place in ECE paper presentation event organized by PVP Siddhartha Institute of Technology on the eve of SITAR2K22 Techno Fest 25-03-2022.
- vi. Ms.A. Sahithya II CSE secured First place in SWAM QUIZ event organized by , PVP Siddhartha Institute of Technology on the eve of SITAR2K22 TECHNO FEST 25-03-2022.
- vii. Ms. CH. Sriharsha of III CSE secured First place in TECH IDEA PRESENTATION event organized by , PVP Siddhartha Institute of Technology on the eve of SITAR2K22 Techno Fest 25-03-2022.
- viii. Mr. A. Karthik III CSE secured Second place in TECH JAM event organized by PVP Siddhartha Institute of Technology on the eve of SITAR2K22 Techno Fest 25-03-2022.
- ix. Ms. K.Poojitha of II CSE secured Second place in QUIZITE event organized by PVP Siddhartha Institute of Technology on the eve of SITAR2K22 Techno Fest 25-03-2022.
- x. Ms. M. Gayathri, Ms. K. Aishwarya, Mr. K. Gopi Chand team of III CSE secured Second place in TECH IDEA Presentation event organized by PVP Siddhartha Institute of Technology on the eve of SITAR2K22 Techno Fest 25-03-2022.
- xi. Ms. G. Puspini, II CSE secured Third place in QUIZITE event organized by PVP Siddhartha Institute of Technology on the eve of SITAR2K22 Techno Fest 25-03-2022.
- xii. Ms. M. Gayathri, III CSE secured Third place in ECE paper presentation event organized by PVP Siddhartha Institute of Technology on the eve of SITAR2K22 Techno Fest 25-03-2022.
- xiii. Ms. M. Gayathri, III CSE secured Third place in IDEATHON event organized by PVP Siddhartha Institute of Technology on the eve of SITAR2K22 Techno Fest 25-03-2022.
- xiv. Mr. G.Harikrishna, II CSE secured Third place in TECH JAM event organized by PVP Siddhartha Institute of Technology on the eve of SITAR2K22 Techno Fest 25-03-2022.
- xv. Ms. L. Tejaswi, III CSE secured Third place in TECH IDEA Presentation event organized by ,
 PVP Siddhartha Institute of Technology on the eve of SITAR2K22 Techno Fest 25-03-2022.
- xvi. Ms. N. Jaya lakshmi, III CSE secured Certificate of Appreciation in the event Reverse Coding at Shaastra 2022, IIT Madras on 11-03-2022.

- xvii. Ms. N. Jaya lakshmi, III CSE secured Certificate of Appreciation in the event Shaastra Programming Contest at Shaastra 2022, IIT Madras on 11-03-2022.
- xviii. Ms. B. Kanaka Aparna, III CSE participated in the event Code Play in Roboweek 2.0 Contest conducted from 21-03-2022 to 27-03-2022 organized by Robotics society at NIT Hamirpur.
- xix. Mr. Rajesh Chandra presented a poster titled "Oxygen level measurement in water using IOT devices for efficient Aqua farming" at 3rd International Conference on Rural Technology Development and Delivery at IIT Jodhpur, Rajasthan from 4-3-22 to 6-3-22.
- xx. Ms. R. Mounisha presented a poster titled "Development of IOT enabled Aqua Pond monitoring system to increase the livelihood and proceeds of the Aqua Farmers for Rural areas" at 3rd International Conference on Rural Technology Development and Delivery at IIT Jodhpur, Rajasthan from 4-3-22 to 6-3-22.
- xxi. Ms.N.Jaya Lakshmi III CSE participated in the event "Reverse Coding" Shaastra 2022 at IIT Madras.
- xxii. Ms.N.Jaya Lakshmi III CSE participated in the event "Shaastra Programming contest" Shaastra 2022 at IIT Madras
- xxiii. Mr.S.Siddharth II CSE participated in the event Hackathon 2022 organized by Department of IT at PVPSIT in association with Institution Innovation Council.
- xxiv. Mr.B.Sudeep III CSE won Second place in Debugging competition of One day National level Cultural Syposium Organized by Dhanekula Institute of Engineering & Technology, Vijayawada held on 21st May 2022.
- xxv. Mr.S.Siddharth II CSE won First Place in Expro competition of CREO 2022, Organized by CSI Student Chapter of Information Technology, Velagapudi Ramakrishna Siddhartha Engineering College,Vijayawada held on 4th - 5th May 2022.
- xxvi. 38 students were trained in Robotics and Automation by NIT Nagaland and were able to build five models 1. Humanoid 2. Robotic Arm 3. Generating power from piezoelectric sensor 4. Home Automation and 5. Obstacle Avoidance Rover.
- xxvii. Mr.M.Dharmateja was selected by ACM India Summer School on Shape Modeling which will be organised by IIIT Delhi.
- xxviii. 192 students of CSE were certified for various courses in NPTEL.
- xxix. 49 studetns of CSE were certified by Microsoft: for courses Introduction to JAVA programming and Mobility & Device fundamentals.

- xxx. Three teams-Mr.K.GopiChand, Ms.Alekya and Ms.B.K.Aparna, were qualified for AICTE Smart India Hackthon pre-screening test under the guidance of the mentors Dr.B.Janakiramaiah, Dr.B.Lakshmi Ramani, Dr.J.Rama Devi, Mr.B.Vishnu Vardhan and Mr.V.Rajesh.
- xxxi. 5 students of III CSE completed AWS Cloud Practitioner Global Certification.
- xxxii. Ms. T.Dhanya Sree, Ms.Veena Sai Sree, Mr.P.Naga Raghavendra of II CSE and Mr.V.Sri Chandan of I CSE completed interview for selection of UIF (University Innovation Fellow) program by Stanford University, USA.

b) Extra-curricular Activities:

- i. Ms .L. Tejaswi, III CSE secured First place in Singing event organized by PVP Siddhartha Institute of Technology on the eve of SITAR2K22 Techno Fest 25-03-2022.
- Ms. V.S.N. Himaja, II CSE secured First place in EXTEMPORE event organized by PVP Siddhartha Institute of Technology on the eve of SITAR2K22 Techno Fest 25-03-2022.
- Ms. M. Gayathri, III CSE secured First place in logo making event organized by PVP Siddhartha Institute of Technology on the eve of SITAR2K22 Techno Fest 25-03-2022.
- iv. Mr. K.chaitanya, II CSE secured second place in logo making event organized by PVP Siddhartha Institute of Technology on the eve of SITAR2K22 Techno Fest 25-03-2022.
- v. A total of 241 participants have registered (III BTech 129 students and II B.Tech 112 students) and participated in various events organized by PVP Siddhartha Institute of Technology on the eve of SITAR2K22 Techno Fest 25-03-2022 and 26-03-2022.



Fig.: PVP Siddhartha Institute of Technology organised SITAR2K22 TECHNO FEST

 vi. Mr.B. Yegnesh Sai and Mr.B.Sudeep III CSE participated in Blind Coding competition of One day National levlel Cultural Syposium Organized by Dhanekula Institute of Engineering & Technology, Vijayawada held on 21st May 2022.

- vii. Mr.B. Yegnesh Sai and Mr.B.Charan Karthik III CSE participated in Expro competition of CREO - 2022, Organized by CSI Student Chapter of Information Technology, Velagapudi Ramakrishna Siddhartha Engineering College, Vijayawada held on 4th - 5th May 2022.
- viii. 18 Students of II CSE has participated in Expro competition of CREO 2022, Organized by CSI Student Chapter of Information Technology, V.R.Siddhartha Engineering College, Vijayawada held on 4th - 5th May 2022.
- ix. 24 Students of III CSE participated in "Cultural Fest-2022" organized by Dept of CSE, PVP Siddhartha Institute of Technology on 24-05-2022.
- x. 51 Students of II CSE participated in "Cultural Fest-2022" organized by Dept of CSE, PVP Siddhartha Institute of Technology on 24-05-2022.



Fig.:"Cultural Fest-2022" organized by Dept of CSE, PVP Siddhartha Institute of Technology on 24-05-2022.

c) Students Publications

Papers Published in Journals: 2

- Mr.M.Surya Tej,Mr.T.Veerendra Saradhi, Ms.M.Spandana, Ms.V.Savya, and Dr.S.Madhavi published a paper "Hand Written Text Recognition using Deep Learning", in International Journal for Research, Volume-10, Issue-IV, April-22, ISSN:2321-9653
- Dr.B.Lakshmi Ramani, Dr.A.Jaya Lakshmi, Mr.B.Anudeep and Mr.B.V.S.K.Bapiraju Kumar published a paper "Driver Drowsiness Detction using light weight deep CNN Models on NTHU-DDD", Vol-26 and Issue-3,Jun-22, ISSN:0972-3641 (UGC)

Papers Published in Conferences: 12

- Mr.M.Naga Venkat Sri Karthik, Mr.B.Yeswanth Kumar, Mr.R.Venkata Dinesh, P.Sai Siva Pavan, Dr.S.Madhavi presented and published a paper "Image Analysis for Malaria Parasite or Unifected Detection Using Ensemble Techniques" in International Conference on Science, Technology, Engineering and Mathematics, 28-May-2022.
- Mr.M.Surya Tej, Mr.T.Veerendra Saradhi, Ms.M.Spandana,Ms.V.Savya, and Dr.S.Madhavi presented and published a paper "Handwritten Text Recognition using CRNN and CTC Loss" in International Conference on Science, Technology, Engineering and Mathematics, 28-May-2022.
- iii. Dr.K.Koteswararao, Ms.K.Sravya, Mr.K.Jaya Phanidra and Mr.G.Giri Ratna Sai presented and published a paper "Machine Learning Based Drug Recommendation from Sentiment Analysis of Drug Rating and Review" in Workshop on Artificial Intelligence, 27-28, Jan, 2022.
- iv. Mr.G.Sankara Sai, Mr.A.V.S.Raghunath, Mr.K.Mahesh,Mr.B.S.Bharath Naik, Dr.B.N.Swamy presented and published a paper "Unmanned Aerial Vehicle Object Detection and Recognition using Deep Learning", in International Conference on Sustainable Computing and Data Communication Systems",7-9 April-2022 (IEEE Conference)
- Mr.A.Sai Ram, Mr.B.Venkata Sai Saketh, Mr.Ch.Sushruth, Mr.K.Pandu Ranga Pavan and Ms.D.Swapna presented and published a paper "Segmentation of Potholes From Road Images" in 4th International Conference on Smart Systems and Inventive Technology" in 20-22 Jan-2022, ISBN:978-1-6654-0118-0 (IEEE Conference)
- vi. Ms.K.Keethi, Ms.B.Meghana, Ms.K.Sahitya, Ms.D.Jyothi Priyanka and Mrs.D.Sree Lakshmi published and presented a paper "Credit Card Fraud Identification Using Logistic Regression

and Local Outlier Factor", in 2nd International Conference on Interdisciplinary Cyber Physical Systems (ICPS), 10th May-2022, ISBN:978-1-6654-7022-3

- vii. Mr.Ch.Adarsh, Mr.Ch.Sai Harsha Vardhan, Mr.Ch.Naga Supriya, Ms.O.Prasana Pravalika and Dr.N.V.Ramana Gupta presented and published a paper "Convolutional Neural Networks based Enhanced Forest Monitoring System for Early Fire Detection" in 7th International Conference on Communication and Electronics Systems (ICCES 2022), 22 - 24 Jun-22, ISBN:978-1-6654-9633-9
- Wr.B.Nitesh, Ms.A.Madhuri, Ms.B.Sai Manogna, Mr.K.Naga Jogendra Babu, Ms.N.Iswarya, Mr.G.Mohan Trivendra presented and published a paper "Brain Tumor Segmentation using U-Net based on Inception" in International Conference on Artificial Intelligence and Smart Energy, ISBN: 978-1-6654-0052-7 (IEEE Conference)
- ix. Ms.M.Bindu Vardhini, Mr..K.Y.N.Raju, Mr.M.Jatin Chowdary, Ms.V.Harshitha, Dr.S.Phani Praveen presented and published a paper "Automating the Creation of Machine Learning Algorithms using basic math" in 4th International Conference on Smart Systems and Inventive Technology" in 20-22 Jan-2022, ISBN:978-1-6654-0118-0 (IEEE Conference) (Scopus)
- x. Mr.Abdul Gafoor,Ms.A.Lakshmi Srujana, Ms.A.Nagasri, Mr.G.Sri Sai Durga Prasad, Mr.D.Lokesh Sai Kumar presented and published a paper "KNN Based Entertainment Enhancing System" in 6th International Conference on Trends in Electronics and Informatics (ICEI), 28-30 April-22, ISBN: 978-1-6654-8328-5 (IEEE Conference)
- xi. Mr.D.Jaswanth Babu, Ms.G.Sushmitha, Ms.D.Lasya, Mr.D.Gopi Krishna, Mr.V.Rajesh presented and published a paper "Identifying Fake News using Machine Learning" in International Conference on Electronics and Renewable Systems",16-18 Mar-22,Tuticorin, ISBN: 978-1-6654-8424-4 (IEEE Conference)
- xii. Ms.V.Vaishnavi, Ms.S.Samuyktha, Ms.V.Mounika Ravali, Ms.P.Sarayu, Mr.B.Vinay Kumar presented and published a paper "Future Prediction of COVID-19 based on Supervised Machine Learning Models", in 6th International Conference on Trends in Electronics and Informatics, 28-30 April-2022. ISBN:987-1-6654-8328-5 (IEEE Conference)

Higher Education:

- i. 15 Students of IV B.Tech were qualified in GRE exam to pursue higher education.
- ii. 8 Students were qualified in IELTS Exam.

- iii. Ms. D. Srihasa qualified Duolingo test in the month of February 2022.
- iv. Ms.Tayyaba Shaheen secured All India Rank of 4863 in GATE exam
- v. Mr. M. Deva Harsha qualified in NMAT exam.
- vi. Mr. M.Deva Harsha got admission in International School of Management Excellence-Bangalore in the month of March 2022.
- vii. Ms. B.Lavanya got admission for Master of Management degree in Graduate School at Penn State.
- viii. Ms. D. Srihasa got admission for MS degree at University of Missouri in Kansas city
- ix. Mr.SaiRam Atluri qualified TOFEL Exam.

S.NO	REG.NO	NAME	OFFERED COURSE	UNIVERSITY	REFERENCE NUMBER
1.	18501A0504	SaiRam Atluri	Cybersecurity, MS	University of Houston	April 29 2022 Student (PeopleSoft) ID: 2198739
2.	18501A0514	B.Lavanya	Master of Management degree	Graduate School at Penn State.	February 25, 2022 PSU ID: 993938106
3.	18501A0522	Manikanta Rohith Chatrathi	M.S	University of Central Missouri	March 17,2022 Student ID:700740717
4.	18501A0525	Sushruth Chunchu	Computer Science (MS).	The University of Alabama at Birmingham	April 18 2022
5.	18501A0541	G.Giri Ratna Sai	MS	Purudue University	February 25,2022
6.	18501A0544	Jagabattula Divya	Computer Science MS Program	Luddy School of Informatics, Computing, and Engineering	March 22,2022 University ID:2001079136
7.	18501A0551	Mohan Sri Vishnu karlapudi	Computer Science MS Program	New Jersey Institute of Technology	April 13, 2022 NJIT ID:31602950
8.	18501A0556	Kona Sravya	International Management(M Sc)-MIM	OE Gaillimh NUI galway	December 21,2021 Student ID:22222458

9.	18501A0561	Shanmuga Kothapalli	MS in Computer Information	ST.MARY'S University	May 11,2022 Student
		Kotnapam	System program	Oniversity	ID:S00731073
10.	18501A0564	K.Yasaswi	Computer Science MS Program	College of Engineering & Applied Science University of Cincinnati	November 4,2022
11.	18501A0567	Makineni Surya Tej	Computer Science MS Program	University of Texas at Arlington	May 25, 2022 UTA ID: 1002064961
12.	18501A0568	Spandana Mallempati	Computer Science MS Program	Texas tech University Graduate School	March 3, 2022
13.	18501A0570	Kavitha mandala	MS Computer Science	FLORIDA TECH	March 3, 2022
14.	18501A0572	Mangalapurap u Padmini	MS Engineering Management	Florida Institute of Technology	April 25,2022
15.	18501A0577	Sai Krishna Nikhitha Mikkilineni	Computer Science MS Program	University of Florida	April 12, 2022
16.	18501A583	Sai meghana myneni	MA Program	Texas A&M university CORPUS CHRISTI	
17.	18501A0591	P.Sai Siddhartha	Computer Science MS Program	University of Houston	UH ID: 2191129
18.	18501A0598	Sai Appala Rahul	MS Program	Rochester Institute of Technology	University ID: 374007194 December 21/2021
19.	18501A05A4	Davuluri Srihasa	MS Program	University of Missouri-Kansas city	Student ID number:16338806
20.	18501A05A5	S.Aditya Vardhan Sai Kiran	MS Program	University of FLORIDA Herbert Wertheim College of Engineering	April 21,2022 UFID:2241-3121
21.	18501A05A6	Tayyaba Shaheen	Computer Science MS Program	Northern Arizona University	NAU ID: 6249641

22.	18501A05B2	V.Vaishnavi	Computer Science MS	Georgia State University	February 8, 2022
			Program		
23.	18501A05B4	Vemulapalli	Computer	Georgia State	
		Jasmika	Science MS	University	February 8, 2022
			Program		

Placements

IV Year

- i. Mr. M.Surya Teja of IV CSE got selected in Lumen Technologies with a package of 6LPA.
- ii. Ms. V Harshitha, Mr. S. Aditya Vardan Sai Kiran got selected in QualityKiosk Technologies with a package of 2.25LPA.
- iii. Ms. O Prasanna Pravallika of IV CSE got selected in Mind tree with a package of 4LPA.
- iv. Ms. S. Samyuktha of IV CSE got selected in Deloitte with a package of 8.1 LPA and with a paid internship of Rs. 25000 per month.
- v. Ms. K. Siva Venkata Charitha of IV CSE got selected in Hitachi with a package of 5LPA.
- vi. Ms. K.Naga Vigneswari, Ms. Sk. Sana Muthaharunnisa students of IV CSE got selected in HSBC with a package of 9 LPA.
- vii. Ms. V. Harshitha got selected in Infosys with a package of 3.5 LPA.
- viii. Ms. Bindu Vardhini cleared Round-2 for Walmart.
- ix. Mr.G.Sankara Sai got selected for ivanti with a package of 12.0 LPA
 - Mr. D.Jaswanth Babu and Mr.G.Sankara Sai got selected for TCS digital with a package of 7.0 LPA
- xi. Ms. Ch. Prasanna Chandrika got selected for VIRTUSA with a package of 5.5LPA.
- xii. 9 students of III CSE got selected for TCS NINJA with a package of 3.5 LPA

III Year

- i. 14 students of III CSE got selected in HEXAWARE with a package of 4LPA.
- ii. 6 students of III CSE cleared Round-2 for Wallmart.
- iii. 14 students of III CSE cleared Round-1 in Digital Nurture 2.0 GenC Pro AWS
- iv. 20 students of III CSE cleared Round-1 in Digital Nurture 2.0 GenC Next JAVA
- v. Mr. G. Sai Venkata Naga Sudarshan Susheel got selected for VIRTUSA with a package of 7.0 LPA.
- vi. 26 students of III CSE got selected for VIRTUSA with a package of 5.5LPA.

World of Data Science



World of Data Science: Unleashing the Power of Knowledge

In the world of data science, knowledge truly is power. Every dataset holds potential insights, from predicting market trends to discovering life-saving medical treatments. Data science combines mathematics, programming, and statistical analysis to transform raw data into actionable insights, guiding everything from business decisions to scientific research. Just as the proverb goes, "Data is the new oil," and today's data scientists are the skilled engineers extracting its value. As we collect more data than ever before, data science equips us with the ability to understand and shape our world in unprecedented ways. At the core of data science are machine learning and artificial intelligence, where algorithms analyze enormous datasets to detect patterns and predict outcomes. For instance, in healthcare, data scientists can analyze genetic information to personalize treatments, discovering patterns that may prevent diseases. In business, they can predict customer behavior and optimize supply chains. This field upholds the proverb, "Knowledge is treasure, but practice is the key to it," underscoring the importance of interpreting data in

practical, ethical ways. Data science is not just about numbers but about understanding and responsibly

applying these insights to real-world challenges.

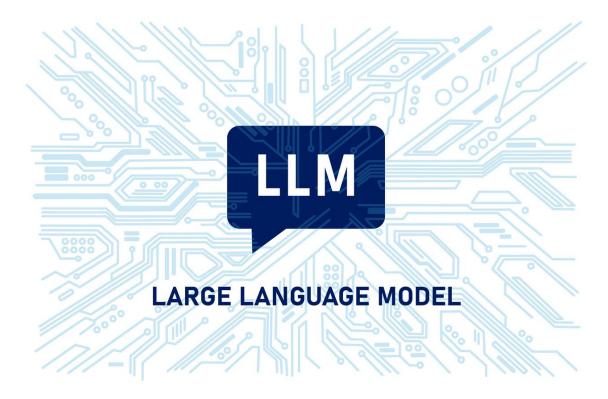
Data science is also vital for tackling global issues like climate change, urban planning, and social inequality. Through data, we gain the wisdom to make decisions that improve lives, support sustainability, and encourage equitable growth. This aligns with the ancient wisdom, "A wise man will make more opportunities than he finds." In this field, data scientists do precisely that: they don't just analyze data, but they reveal opportunities and possibilities, building a more informed, innovative, and resilient world. With data guiding us, the future shines brighter, leading us toward a world where informed decisions create lasting, positive change.

"Knowledge is treasure, but practice is the key to it"

Ms.Kona Sravya (18501A0556) IV B.Tech Ms. K.Naga Vigneswari (18501A0554) IV B.Tech Ms.Tayyaba Shaheen (18501A05A6) IV B.Tech

The Rise of Large Language Models (LLMs)

Redefining AI and Human Communication



Large Language Models (LLMs) represent a groundbreaking advancement in artificial intelligence, designed to understand and generate human-like language by analyzing vast amounts of text data. These models, such as GPT, BERT, and T5, are constructed with billions of parameters, allowing them to grasp nuances, context, and even humor or emotions in text. LLMs are the backbone of numerous modern applications—from chatbots and virtual assistants to tools for drafting content, summarizing documents, and generating creative writing. The impact of LLMs goes beyond efficiency; it enhances how we communicate, create, and access knowledge, making AI an integral part of everyday interaction.

The strength of LLMs lies in their training, which involves processing extensive datasets from books, articles, websites, and other text sources. Through this training, they learn the probability of word sequences and develop an understanding of grammar, syntax, and semantics. This enables LLMs to complete tasks like answering questions, translating languages, summarizing long texts, and even

generating code. One of the most profound impacts of LLMs is in fields such as education and accessibility. For example, they help convert written content into different languages in real-time, making learning resources more inclusive. In healthcare, LLMs assist doctors by organizing and interpreting patient data or even generating simplified medical information for patients.

However, the rise of LLMs brings ethical challenges that must be addressed. Since LLMs are trained on internet data, they can inadvertently reproduce biases and misinformation present in those sources. Their capacity to generate persuasive language also poses risks for misinformation and misuse. To harness their potential responsibly, researchers and developers focus on creating mechanisms that ensure transparency, fairness, and accountability in LLMs' responses. As LLMs continue to evolve, they are likely to become even more integral to fields like customer service, content creation, and knowledge management, shaping a future where AI enhances human capabilities while addressing its inherent challenges thoughtfully.

"Knowledge is power, guided by algorithms."

Ms.N.Jaya Lakshmi (19501A05D4) III B.Tech Ms. B.Anvitha(19501A0532) III B.Tech Ms. K.Madhuri (19501A0581) III B.Tech