



VNR VIGNANA JYOTHI INSTITUTE OF
ENGINEERING AND TECHNOLOGY



DIGITAL DYNAMOS

FUELING THE FUTURE WITH AIML & IoT

NEWSLETTER-2023

CSE - AIML & IOT



ABOUT VNRVJIET

VNR Vignana Jyothi Institute of Engineering and Technology (VNRVJIET) is an autonomous institution dedicated to deepening knowledge and shaping the future. Established in 1995, it's a testament to the Vignana Jyothi Society's commitment to quality education. Located on a 7.33-hectare campus in Hyderabad,

VNRVJIET is known for its strong foundations, commitment to excellence, and comprehensive student development. It offers various programs, including B.Tech, M.Tech, and Polytechnic courses, making it one of the top engineering colleges in the region.

ABOUT DEPARTMENT

At the core of this department, lies Artificial Intelligence (AI), the driving force behind groundbreaking breakthroughs in various fields. The department's relentless pursuit of AI excellence unlocks the potential to unravel complex problems and improve the efficiencies of the students to meet the industry needs. The department's expertise in machine learning drives the development of robust and adaptable models, empowering the students to unlock the untapped potential from various data assets. In synergy with AI and machine learning, the department embraces the transformative potential of the Internet of Things (IoT), which interconnects a myriad of devices, sensors, and systems. By seamlessly integrating the physical and digital worlds, IoT creates an intricate network of intelligent endpoints that generate a vast ocean of data. The department guides the students to harness the data generated through various devices, sensors and also work on real time datasets to unlock the new possibilities facilitating intelligent decision-making. The students are encouraged to work on real-time monitoring projects across diverse domains.

ABOUT KRITHOMEDH

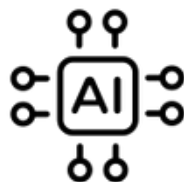
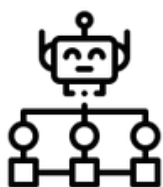
KRITHOMEDH was formed in 2022 by few AIML & IoT Enthusiasts .This Student community raises awareness in the field of AI, ML and IOT through hands on Workshops ,hackathons and other exciting events.This club was inaugurated by chief guest Mr.Sangameswar Reddy garu and department Faculty.



VISION

To emerge as an epicenter having transformative impact in the education and research of Artificial Intelligence & Machine Learning and Internet of Things with an ecosystem that contributes to the society through innovativeness and creativeness.

Digital Dynamos is launched by CSE-AIML and IoT department of VNRVJiet. It serves as an annual compendium, encompassing a comprehensive details of technical updates and valuable insights for the benefit of its members. Within its pages, one can find an exhaustive account of the activities conducted throughout the academic year, accompanied by insightful articles contributed by the students themselves.



Mission 1: To Impart innovative teaching and learning methodologies to generate knowledge through the state-of-the-art concepts and technologies in AI-ML and IoT with personal and professional responsibilities and commitment to lifelong learning with societal aspirations

Mission 2: To produce successful Computer Science and Engineering graduates with a specialization in AI-ML and IoT.

Mission 3: To establish centers of excellence in leading areas of AI-ML and IoT in collaboration with industry to uplift innovative research and development.

MISSION

Department of CSE- AIML & IoT strives to create an ecosystem that not only excels in education and research but also actively contributes to the society through innovation and creativity. The primary goal is to pursuit excellence in education and research by creating solutions that address global challenges. The faculty members within the department are highly skilled and well-versed in their respective fields, acting as valuable resources in seminars, faculty development programs, conferences and delivering invited talks. With certifications in Artificial Intelligence and Machine Learning from renowned institutions such as IIT Hyderabad, they bring a wealth of expertise to the table. By staying up to date on the latest trends and developments, they ensure that their teaching methodologies and curriculum remain relevant and aligned with industry standards. The faculty's commitment to continuous learning and professional development enables them to provide the students with valuable exposure to real-world scenarios and industry best practices, bridging the gap between academia and industry.

In summary, our department is driven by a motto that prioritizes experiential learning through hands-on training, course-based projects, interdisciplinary projects, research projects and summer internships. By integrating experiential learning into our curriculum, students gain valuable practical skills that complement their theoretical knowledge. The interdisciplinary environment fosters an exchange of ideas, promotes collaboration, and nurtures a culture of continuous learning, ensuring that the department remains at the forefront of global AI and IoT advancements.

MESSAGES

Dr. C D Naidu (PRINCIPAL)

At VNRVJiet, our educational philosophy centers around the journey of "Presenting," fostering a deep connection to knowledge and a commitment to shaping the future. With unwavering dedication to quality, integrity, and innovation, we've established a solid foundation that continues to thrive.

Our commitment to excellence and global standards is at the core of our mission. At VNRVJiet, we are dedicated to empowering our students to excel and make a positive impact.

I'm thrilled to highlight the exceptional journey of our Department of Computer Science and Engineering specializing in Artificial Intelligence, Machine Learning, and the Internet of Things (CSE AIML & IoT). Our unwavering commitment to innovation, research, and excellence has positioned us as a beacon of technological advancement. Our talented faculty, dedicated students, and relentless pursuit of knowledge are propelling us into the future.

As the principal, I want to commend your achievements and contributions to our college's reputation and the global AIML & IoT community. Our collective efforts are shaping a brighter tomorrow, embracing the possibilities presented by Mezzanine Technologies. I am confident that together, we will continue to push boundaries, inspire, and lead the way in this dynamic field. It's a pleasure to launch the newsletter "Digital Dynamos."



Dr. B Chennakesava Rao (Director)

At VNRVJIET, our mission is to prepare socially responsible engineers, managers, and entrepreneurs, equipping them for the future through innovative projects and modern pedagogy. Quality, integrity, and an unwavering commitment to continuous improvement drive our vision, reflecting our dedication to excellence in education and research.

The Department of AIML & IoT remain steadfast as a cornerstone of cutting-edge education and research at our college. Our devoted team of faculty and staff is resolute in fostering innovation and excellence in Artificial Intelligence, Machine Learning, and the Internet of Things. Our students, the driving force behind our success, showcase remarkable talent and passion.



Together, we embrace the ever-evolving technology landscape, pushing boundaries and nurturing the next generation of experts. As the Director, I take immense pride in this department's achievements and eagerly anticipate our continued growth, innovation, and global impact. The launch of the "Digital Dynamos" newsletter is a significant moment for us, and we look forward to its continued role in inspiring and informing countless students about our department's remarkable achievements and legacy.

Dr. N Sandhya (Professor, H.O.D of AIML & IoT)

At the core of our department is Artificial Intelligence, a driving force behind groundbreaking advancements in various fields. Our unwavering commitment to AI excellence empowers our students to tackle complex problems and meet industry demands. We specialize in machine learning, developing robust models from diverse data sources.

Embracing the transformative potential of the Internet of Things, we interconnect devices and sensors, creating an intelligent network of endpoints that generates vast data streams. Our students engage in real-time monitoring projects across diverse domains.

Our mission is crystal clear: to be a hub of excellence in AI, Machine Learning, and IoT education and research. We offer innovative teaching, produce successful graduates, and establish centers of excellence through industry collaboration. Our dedicated faculty, certified by renowned institutions, ensures our teaching remains relevant and industry-aligned. We prioritize experiential learning, bridging the gap between academia and industry through hands-on training, research projects, and internships.

We are a department driven by innovation, creativity, and an unwavering commitment to excellence. Join us in shaping the future of AI, Machine Learning, and IoT. Together, we will leave a lasting impact on the world. The launch of the "Digital Dynamos" newsletter is a significant moment for us, and we eagerly anticipate its ongoing role in inspiring and informing countless students about our department's remarkable achievements and legacy.



Dr. A Kousar Nikhath (Faculty Co-ordinator)

As the Faculty Coordinator, I am immensely proud to be a part of the Department of CSE AIML & IoT at VNRVJIET and our collaboration with the KRITHOMEDH club. We are a vibrant hub for cutting-edge technology and innovation, and our dedicated faculty members are deeply immersed in the realms of Artificial Intelligence, Machine Learning, and the Internet of Things.



Our primary focus is on inspiring and empowering our students through experiential learning, interdisciplinary projects, and strategic industry partnerships. We aim to nurture a spirit of exploration and technical excellence, and it's an exhilarating journey that we are thrilled to share with our dedicated students and faculty.

The launch of the "Digital Dynamos" newsletter is a significant moment for us. We look forward to its continued role in inspiring and informing countless students about our department's remarkable achievements and legacy. Thank you for being a part of this exciting endeavor.

Ms. K Naga Durga Saile (Faculty Co-ordinator)

The Department of CSE AIML & IoT at VNRVJIET is a thriving center of innovation and learning. We take great pride in guiding our exceptional students through the ever-evolving world of Mezzanine Technologies. Committed to cutting-edge research, we continuously explore new horizons and possibilities.

Our students, who are the heartbeat of the department, consistently impress us with their enthusiasm and unwavering dedication. Together, we are shaping the future of technology and making meaningful contributions on a global scale.

As faculty members, we are excited to be part of this transformative journey and eagerly anticipate achieving many more milestones in our department. The launch of the "Digital Dynamos" newsletter is a significant moment for us, and we look forward to its ongoing role in inspiring and informing countless students about our department's remarkable achievements and legacy.





FACULTY



Dr. N. Sandhya

Dr. Narisetty Nirmalajyothi

Mr. Ch. Vijayakumar

Dr. Y. Sagar

Mrs. Sayeedakhanum Pathan

Ms. Preethy Singh

Dr. A Kousar Nikhath

Mr. B Venkatesh Reddy

Ms. S. Mamatha

Dr. A. Harshwardhan

Mr. K. Kishan Babu

Ms. K. Naga Durga Saile

Dr. G. Nagaraju

Ms. T. Jyothna Rani

Mr. Kakumanu Sreenivasara

Dr. Sitanath Biswas

Mr. Bhupesh Deka

Ms. Gadde Mamatha

INSIGHTS



Ms. Jajala Nikitha

Mr. M Ajay Dilpi Kumar

Etikala Gurumohan Rao

Mr. Madasu Gnavardhan

Ms. Archana kalidindi

Sajja Praveen Kumar

Mr. Shaik Mabasha

Venati Sudhakar

Birru Sandhya

Mr. A. Srinivasa Rao

Ms. Jupalli Pushpa Kumari

Venna Navya Sree

Ms. Plabindela Swetha

Ms. Yavanamandha Prasanthi

Bollampalli Pravalika

Sunkam Navya

DEPARTMENT HIGHLIGHTS



The Department of AIML and lot came alive with vibrant celebrations on September 7, 2023, as they joyfully commemorated Sri Krishna Janmastami in the warm and welcoming ambiance of B-002. The event was honored by the presence of a distinguished guest, Dr. Yarlagadda Padma Sai, the esteemed Dean of Students Progression.

SRI KRISHNA JANMASTAMI

The gathering was a testament to the spirit of unity and diversity, with the heads and faculty members from various departments converging to partake in the festivities, making it a memorable day filled with shared joy and cultural richness.



DEPARTMENT HIGHLIGHTS



We felicitated our IoT students as they embark on their new journey from classrooms to careers. Their achievements are a testament to their unwavering commitment to excellence, serving as an inspiration to all aspiring professionals.

FELICITATION OF IOT AND AIML STUDENTS

We congratulated our AIML students as they begin their new journey from the classroom to the workplace. Their accomplishments are evidence of their unshakable dedication to greatness and serve as an example to all aspiring professionals.



DEPARTMENT HIGHLIGHTS



MICROTEACHING

Microteaching, a crucial component of teacher training, involves short, focused teaching sessions that allow educators to refine their instructional techniques, and they graciously shared their valuable insights and received constructive feedback.

The department faculty has successfully completed Microteaching and Induction, marking a significant milestone in their professional development.

DEPARTMENT HIGHLIGHTS



In the 2022-2023 Academic year , the dedicated faculty members of the CSE-AIML & IoT department, Dr. A. Kousar Nikhath and Dr. G. Nagaraju, collaborated with VRS School, contributed significantly to our department and generating a revenue of 2.5 lakhs.

FUNDS RAISED

Their remarkable efforts exemplify the positive impact of academic partnerships on both education and financial sustainability.





FACULTY ACHIEVEMENTS

Dr.A.Kousar Nikhath acted as Resource Person for a Webinar on the topic "Emerging Trends and Employability Skills in Artificial Intelligence" on 31.01.2023.

Dr. N. Sandhya Professor & Head Department of CSE-AIML & IoT as Co-PI submitted ER&IPR Proposal Project, Proposal titled "Design and Development of LASER Open Path (LOP) System for Measurement and Characterization of Atmospheric Turbulence Over Horizontal path of 5km" on 20-12-2022

Mr. Kishan Babu Assistant Professor, Dr. N. Sandhya Professor, Dr. Kousar Nikhath Associate Professor, Dr. Sithanath Biswas Associate Professor, Dr. Y. Sagar Associate Professor, the faculty of the department acted as reviewers for various high indexed Scopus and SCI journals

Dr. A. Harshavardhan was awarded best Faculty award in 2022 by Malla Reddy Institute of Technology

Dr. N. Sandhya Professor & Head Department of CSE-AIML & IoT has Delivered a section on data in preprocessing in UGC Sponsored two-week refresher program on "Machine Learning and Data science" at JNTU, Hyderabad on 19-12-2022

Dr. A. Kousar Nikhath was awarded Faculty Excellence award in 2022 by Ed ImmiGo.

Ms. Sure Mamatha got admission to pursue Ph.D in NIT Warangal in 2023 August.

Dr. G. Nagaraju Assistant. Professor CSE-AIML &IoT, was invites as a Guest Speaker on the topic " Search Strategies in AI" at IARE ON 11.08.2022



FACULTY ACHIEVEMENTS

Dr. N. Sandhya Professor & Head Department of CSE-AIML & IoT Chaired the technical session on "Mezzanine Technologies in the International Conference on Recent Trends in Microelectronics, Automation, Computing and Communication Systems" on 28th December, 2022.

Dr. A. Harshvardhan Sr. Assistant Professor Department of CSE-AIML & IoT received appreciation for paper published "Multilayer Stacked Probabilistic Belief Network-Based Brain Tumor Segmentation and Classification", received appreciation from Dr. Carmina E. Dixon D.Sc. in Computer Vision Managing Editor Department of Computer Science, Institute of Engineering and Technology, Global Journals on 02-01-2023.

Dr. Y. Sagar Associate Professor CSE-AIML & IoT, was invited as a guest speaker on the topic "Mechanism for Quality Research Paper Publication" at Department of EIE VNRVJIET on 23.08.22

Dr. G. Naga Raju Assistant Professor, was invited as guest speaker on the topic "Formal Languages and Automata Theory" at HITAM on 7.11.22

Dr. N. Sandhya Professor & Head Department of CSE-AIML & IoT acted as resource person for an FDP on "Unleashing Emerging Research Trends and Advancements in Computer Science" at VIT-AP University on 13.07.2022

Mr. Bhupesh Deka Assistant Professor was invited as a resource person for a workshop on DBMS at KG Reddy College of Engineering on 09.02.23

Dr. N. Sandhya Professor & Head Department of CSE-AIML & IoT acted as Guest Speaker for "Latest Trends in Machine Learning for Signal Processing Applications" from 10th to 12th August 2022.

PATENTS

SI NO.	Name Of Inventor	Title of Invention	Patent File Number	Date Of Filing	Status
1	Miss Shubhashree Sahoo, Dr. Sitanath Biswas, Dr. N. Sandhya, Mr. B.Venkatesh Reddy, Ms. Sayeedakhanum Pathan, Mr. Sahith Battula	AI BASED DEVICE TO PREVENT EARLY CERVICAL SPONDYLOSIS AMONG COMPUTER USERS	202341018801A	31-03-2023	Applied for Examination
2	Dr. Sitanath Biswas, Dr. N.Sandhya, Dr. Gujjeti Nagraju, Mr. B.Venkatesh, Ms Preety Singh	OCR AND DEEP LEARNING-BASED PLAGIARISM DETECTION DEVICE FOR TELUGU LANGUAGE	202341024498	31-03-23	Applied for Examination
3	Dr.Sagar Yeruva, Dr. Krishna Prasad, Dr. T. Sunil Kumar, Dr. Deepak Sukheja, Mr. P. Venkateswara Rao, Dr. Brahmananda Reddy, Dr. Kousar Nikhath. A, Dr. D. N. Vasundhara, Mr. G. S. Ramesh, Mrs. V. Baby, Mr. Ankit Raj Gaddam	DESIGN & DEVELOPMENT OF A SMART SYSTEM TO ANALYZE THE IMPACT OF COVID-19 ON RESPIRATORY SYSTEM USING MACHINE LEARNING	202141017531A	23-04-2021	Published
4	Dr. K. Sudha Rani, Dr. R. Manjula Sri Dr. T. Nireekshana, Dr. Shuchi Tiwari, K.Mani Kumari, Dr. N. Sandhya, Dr. N. Managathayaru K. Vijay Chandra, Naregalkar Akshay, Dr. A. Giriprasad	MOTORIZED ANKLE FOOT DRIVEN CUSTOMIZED PROSTHETIC LEG WITH EXOSKELETON	2.02141E+11	04-8-2021	Published
5	Dr. M. Raja Sekar, Dr.N.Sandhya, Dr. P. Neelakantan, Dr. P. V. Siva Kumar, Dr. G. Suresh Reddy, Dr. P. Subash, Mr.M. Gangappa	TPM-CROWD FUNDING: TRUSTED CROWD FUNDING PLATFORM USING A SMART CONTRACT AND AI-BASED MANAGEMENT SYSTEM	202141052903	17-11-2021	Published

PATENTS

SI NO.	Name Of Inventor	Title of Invention	Patent File Number	Date Of Filing	Status
6	Dr.Y.Sagar, Dr. Krishna Prasad, Dr. T. Sunil Kumar, Dr. Deepak Sukheja, Mr. P. Venkateswara Rao. Dr. Brahmananda Reddy, Dr. Kousar Nikhath.A , D. N. Vasundhara Mr. G. S. Ramesh, Mrs. V. Baby, Mr. Ankit Raj Gaddam	DESIGN & DEVELOPMENT OF A SMART SYSTEM TO ANALYZE THE IMPACT OF COVID-19 ON RESPIRATORY SYSTEM USING MACHINE LEARNING	202141017531A	23-04-2021	Published
7	V. Baby, Dr. S. Nagini, K. Jhansi Laksmi Bai, Dr. Sagar Yeruva, G.Yashwanth, B. Janaki Ram, A. Rikhila, Dr. D.N. Vasundhara, N.V. Sailaja, A. Madhavi	VIRTUAL MOM- RESPONSIVE BABY MONITORING TOY	202141020965A	11-06-2021	Published
8	Dr. Deepak Sukheja, Dr. Umesh Kumar Singh, Dr. T. Sunil Kumar, Dr. P. V. Siva kumar, Dr. Sagar Yeruva, Mrs. Priya Bhatnagar, Mr. N. Sandeep Chaitanya, Dr.Santosh Kumar Choudhary, Dr. Prateek Sharma, Dr. Lokesh Kumar Laddhani, Dr.Bhupendra Kumar Pandya	GPS AND ENCRYPTION BASED MULTI-CHECK AUTHENTICATION PROCESSFOR PREVENTING FRAUD TRANSACTION	202141044509A	08-10-2021	Published
9	Dr.N.Sandhya, Dr. M. Raja Sekar, Dr. Ashish Kumar Chakraverti (Hod), Vivek Kumar, P. Ila Chandana Kumari, Prof. Dr. Yashpal Singh	COMPUTER CACHE MEMORY PERFORMANCE ENHANCE USING NEURAL NETWORKS AND MACHINE LEARNING	202041001789	17-01-2020	Published
10	S.Kranthi Kumar,Dr. B.V. Kiranmayee, Dr. S.Nagini, Dr. Chalumuru Suresh, V.Baby K. Jhansi LakshmiBai, Sravani Nalluri, Dr.A.Kousar Nikhath, P.Radhika Motupalli, Ravikanth, Venkata Naga Raju Thatha	CRITICAL PATIENTS M MONITORING DEVICE: CRITICAL PATIENTSâ€™ MONITORING USING MACHINE LEARNING FEATURE SELECTION TECHNIQUE	202041023578A	12-06-2020	Published
11	Dr. Deepak Sukheja, Dr. G. Ramesh Chandra, Dr. N. Sandhya, Dr. B. V. Kiranmayee, D. Ramesh Reddy	SHELTERED DRIVING SYSTEM FOR AUTOMOTIVE VEHICLES FOR STREAMLINED OPERATION ON ROADS WITH ADHERENCE TO EXTANT RULES AND REGULATIONS	202041045360	13-11-2020	Published



KRITHOMEDH INAUGURATION



KRITHOMEDH , EMBARKED ON ITS JOURNEY WITH A GRAND INAUGURATION ON DECEMBER 3, 2022, HELD AT THE APJ AUDITORIUM IN D-BLOCK. THE EVENT WAS GRACED BY THE PRESENCE OF MR. SANGAMESWAR REDDY, A SENIOR ENGINEERING LEADER AT AMAZON, WHO NOT ONLY UNVEILED THE CLUB'S TITLE BUT ALSO SHARED HIS INSIGHTS WITH THE ENTHRALLED AUDIENCE. DR. N. SANDHYA, THE HEAD OF THE DEPARTMENT OF AIML & IOT, AND OTHER ESTEEMED FACULTY MEMBERS ALSO ADDRESSED THE GATHERING, SETTING THE TONE FOR WHAT PROMISES TO BE AN EXCITING VENTURE. THE CLUB LAID OUT A COMPREHENSIVE AGENDA, INCLUDING VARIOUS ENGAGING ACTIVITIES AND OBJECTIVES DESIGNED TO FOSTER AN IN-DEPTH UNDERSTANDING OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING, KEEP STUDENTS INFORMED ABOUT EMERGING TECHNOLOGIES, AND GUIDE THEM IN THEIR TECHNOLOGICAL EXPLORATION.



ORIENTATION



THE TEAM EMPOWERED CLUB MEMBERS TO INTERACT WITH THE AUDIENCE, CLARIFY CLUB OBJECTIVES, AND HIGHLIGHT THE CRUCIAL ROLES OF KRITHOMEDH'S WINGS – INCLUDING DOCUMENTATION, DESIGN, TECHNICAL EXPERTISE, LOGISTICS, PUBLIC RELATIONS, AND SOCIAL MEDIA MANAGEMENT. IT AIMS TO FOSTER LEADERSHIP, PASSIONATE COMMUNICATION, AND AUDIENCE INVOLVEMENT TO PROMOTE THE CLUB EFFECTIVELY.

EVENTS



LOGO CONTEST

The Krithomedh Community held a logo contest for students, seeking a design that embodies their values of community collaboration and continuous learning. The chosen logo prominently features Neural Networks, symbolizing their commitment to AI and Machine Learning. The fact that this competition was open to all participants and valued each one's opinion made it truly remarkable. The best design was honored with a certificate reinforcing the strong sense of unity and shared purpose that defines the Krithomedh Community.



CODING CONTEST

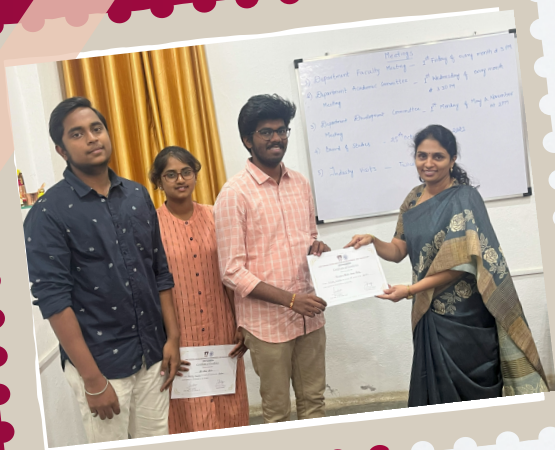
Krithomedh, the student community of AIML & IoT at VNRVJiet, organized an online coding contest via the HackerRank platform, exclusively designed for 2nd and 1st-year AIML and IoT students. A total of 426 students registered for the event, with 253 actively participating. The competition featured a set of five challenging questions to be solved within a strict 2-hour time limit, allowing the use of any programming language.



EVENTS

IDEATHON

For first-year AIML and IoT students of batch 2026, the AIML student community arranged an event named IDEATHON in February 2023. Students from five different domains—Education, Agriculture, Healthcare, Disaster Management, and Open Innovation—were able to present their creative solutions to issue statements during the event. There were two rounds of the competition.



Seven of the sixteen teams that registered for the first round on February 17, 2023, advanced to the second round which took place on February 25, 2023, and each team was given a mentor. Vipaniiv, Tech Work, Infinitely Innovative, Akatsuki, Vision, Primero, and Wolverines were the finalists. Certificates and cash awards were given to the winners.

EVENTS

KAVACH

This national-level hackathon, conducted in collaboration with the Institute Innovation Cell and IEEE CS VNRVJIET, holds a critical mission: to seek out innovative ideas and technological solutions geared towards tackling the pressing cyber security and cybercrime challenges that our intelligence agencies confront in the 21st century.



It stands as a unique platform for students to channel their creativity and problem-solving skills, beginning with the submission of innovative ideas in the initial round. In the subsequent phase, chosen students participate in a rigorous hackathon, where their solutions are put to the test. The standout performers were quite interested in exploring various fields of technology.

EVENTS

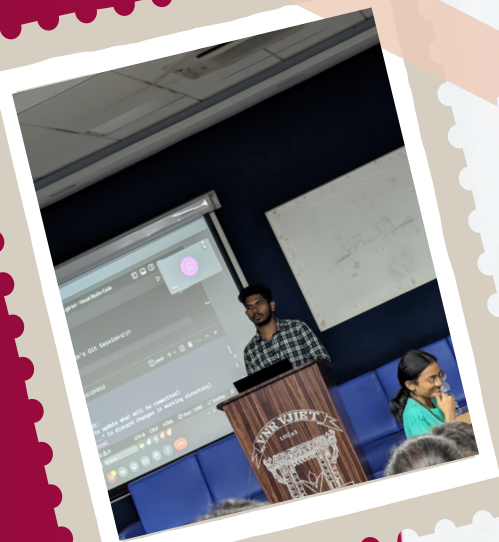
LET'S RESUME

An exciting profile building session aimed at empowering students to craft an impressive resume and a personalized profile that will pave the way for a prosperous career in tech industry. The innovative session promises to equip with the skills and knowledge necessary to embark on a successful journey.



LET'S GIT CONNECTED

An exciting profile building session aimed at empowering students to craft an impressive resume and a personalized profile that will pave the way for a prosperous career in tech industry. The innovative session promises to equip with the skills and knowledge necessary to embark on a successful journey.



EVENTS

AI AND DEEP LEARNING

We had a guest Lecture on AI and Deep Learning featuring renowned speakers. Firstly, Professor KC Santosh from the University of South Dakota, USA. The lecture focused on the idea that AI is not just for computer scientists, providing valuable insights for future AI studies.



Secondly, Dr. Ravinder Hegadi from the Central University of Karnataka . it unraveled the complexities of Deep Learning, elucidating its foundational concepts and its transformative role in today's global landscape. This lecture broadened horizons, highlighting the profound influence of AI and Deep Learning. We extend our gratitude to these esteemed speakers for their enlightening insights.

EVENTS


SMART INDIA HACKATHON

Team Matsyastra, consisting of students from the CSE-AIML had the privilege of being mentored by Dr. Y. Sagar, an Associate Professor in the CSE department with expertise in AIML and Internet of Things (IoT). The team embarked on a remarkable journey by participating in the Grand Finale of the Smart India Hackathon-Software Edition, which took place from August 25th to August 26th, 2022.



The event was hosted at the Nodal Center, Vardhaman College, Hyderabad. This prestigious nationwide event allowed them to showcase their problem-solving and software development skills, competing against top talents from across India. Their participation reflects their dedication to advancing technology and addressing real-world challenges.

SOCIETAL IMPACT PROJECTS



VNR VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY
 An Autonomous, ISO 9001:2015 & QS 1-00 Diamond Rated Institute, Accredited by NAAC with 'A++' Grade NBA Accredited for B.Tech, CE, EEE, ME, ECE, CSE, ESE, IT, AIME, M.Tech, STRE, FE, AIMS, SWE, P-women Empowered by AICTE, New Delhi, Affiliated to JNTUH, NIRF (2022) 113th Rank in Engineering Category, College with Potential for Excellence by UGC, JNTUH-Recognized Research Centres: CE, EEE, ME, ECE, CSE Vignana Jyothi Nagar, Pragathi Nagar, Nizampet (S.O.), Hyderabad-500 090, TS, India. Telephone No: 040-2304 2758/59/60, Fax: 040-23042713, E-mail: postbox@vnrvt.ac.in, Website: www.vnrvt.ac.in

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING (AIML & IOT)
 Creating Societal Impact as Students of CSE AIML Through B.Tech Project

DiseasePredictPro: Machine Learning-based Disease Classification and Prediction

The accurate and timely diagnosis of diseases is essential for the effective treatment and management of patient health, and Machine Learning (ML) techniques have shown great potential in disease classification and prediction tasks due to their ability to handle complex and high-dimensional data.

SYSTEM ARCHITECTURE

```

    graph LR
      RD[Raw dataset] --> DPP[Data Pre-processing]
      DPP --> LPPD[Load Pre-processed Data]
      LPPD --> AMA[Apply ML Algorithms]
      AMA --> EC[Evaluation of Classes]
      EC --> RD
  
```

• Predicts the likelihood of developing serious diseases in the early stages.
 • Easy to use and Secure
 • Uses the latest machine learning algorithms to provide accurate disease predictions.

OUR MODEL RESULTS

Diabetes Prediction

Autism →
 Diabetes →
 Sepsis →

Predict
Result

OUR TEAM

A Pankara
 K Sai Ashritha
 Dr. N Saadnya
 Jagrathi Mekhala
 K Charan Sai

• ML models for the classification and prediction of three different diseases - sepsis, diabetes, and autism - using various algorithms such as support vector machines, logistic regression, K-nearest neighbors, and random forest, with an accurate dataset and following a proper system architecture to identify the best-performing ones for each disease.


Pragathi Nagar, Nizampet (S.O.), Hyderabad 500 090, TS. Phone: +91-40-2304-2758/59/60 www.vnrvt.ac.in

This SignSense is an advanced real-time translation system that uses deep learning and computer vision to bridge communication barriers between sign language users and non-sign language speakers. It detects and translates sign language gestures into actionable text, fostering inclusive interaction. Sign Sense uses LSTM-based architecture, with an accurate dataset and following a proper system architecture to identify the best-performing ones for each disease.

This application empowers individuals with hearing impairments by providing a means to effectively communicate with non-sign language users in various contexts.

Machine learning (ML) techniques have shown great potential in disease classification and prediction tasks due to their ability to handle complex and high-dimensional data.

DiseasePredictPro is a machine learning-based disease classification and prediction tool that predicts the likelihood of developing serious diseases in the early stages. The model uses various algorithms like support vector machines, logistic regression, K-nearest neighbors, and random forest.



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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING (AIML & IOT)
 Creating Societal Impact as Students of CSE AIML Through B.Tech Project

SignSense: Advanced Deep Learning Based Sign Language Real-Time Translation System To Assist Mute Community

SignSense is a cutting-edge real-time model designed to bridge communication barriers between sign language users and non-sign language speakers. Leveraging deep learning and computer vision, SignSense detects and translates sign language gestures into actionable text, fostering inclusive interaction.

SYSTEM ARCHITECTURE

```

    graph LR
      FV[Frame from Video] --> MF[MediaFace FRUSIC]
      MF --> EKF[Extract key points from frame]
      EKF --> GKK[Generate dataset from extracted keypoints]
      GKK --> LDM[Using the dataset for training the LSTM model]
      LDM --> GSM[Generating and storing the model]
      GSM --> UMR[Using the model to recognize signs and display text]
      UMR --> FV
  
```

• SignSense utilizes advanced deep learning models to instantly detect and track key points of hand, body, and face movements, ensuring seamless and immediate sign language translation.
 • With its LSTM-based architecture, it accurately recognizes and interprets a wide range of sign language gestures, converting them into meaningful action names.

OUR MODEL RESULTS

SIGNSENSE (Signs: Sorry)
SIGNSENSE (Signs: Be-Be India Naste)

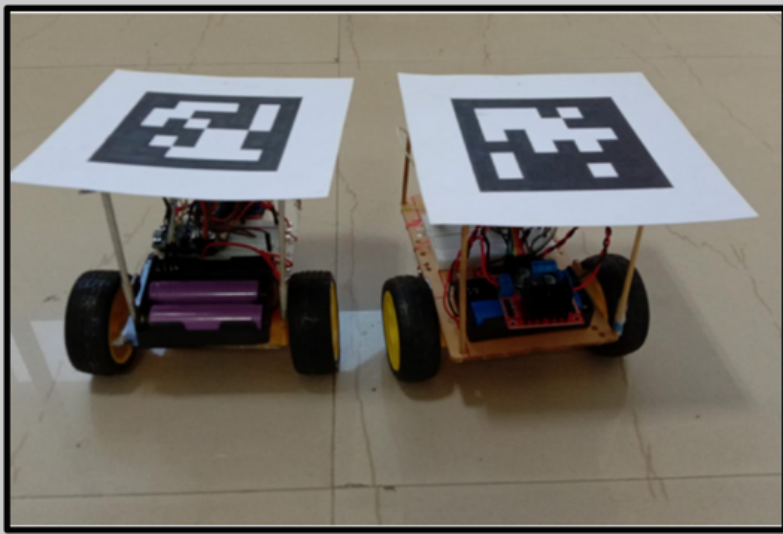
OUR TEAM

Guide: K.N.D Saile
 S Haripriya
 N Manoja
 C Vaishnavi
 S Pranuthi

• This application empowers individuals with hearing impairments by providing a means to effectively communicate with non-sign language users in various contexts, such as education, healthcare, and everyday interactions.

Pragathi Nagar, Nizampet (S.O.), Hyderabad 500 090, TS. Phone: +91-40-2304-2758/59/60 www.vnrvt.ac.in

SOCIETAL IMPACT PROJECTS



The Smart Warehouse Management System is powered by Automated Guided Vehicles (AGVs) and robust computer vision. It adeptly controls and monitors multiple AGVs in public and private warehouses, reducing human labor. AGVs are guided via a central monitoring system utilizing cameras and April tags for precise positioning and orientation. The central system employs advanced algorithms, including probabilistic roadmaps, for efficient navigation. This versatile solution is compatible with modern Warehouse Management Systems and security alerts. It presents a cost-effective alternative to human labor, making it suitable for various warehouse sizes and industries globally, enhancing efficiency, reducing costs, and offering extensive oversight of warehouse operations.

The "Smart Surveillance Using Spherical Robot" project introduces a versatile spherical robot for land and underwater surveillance. It has unique mobility, balance through a gyroscope, and wireless communication. This smart surveillance tool can operate from a distance of up to 500 meters and replace humans in challenging environments. It's also adaptable for industrial tasks.

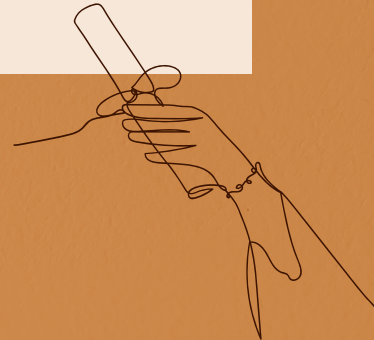


NPTEL



NPTEL TOPPERS FROM AIML

NPTEL (National Programme on Technology Enhanced Learning) is an initiative by the Indian government to provide high-quality online education and learning resources. They are the NPTEL Toppers from AIML Final year



NPTEL TOPPERS FROM IOT

Topper in NPTEL from IoT in cloud computing. They had set a high benchmark for their peers with their exceptional performance.



INTERNSHIP

SNO	ROLL NUMBER	STUDENT NAME	SECTION	CRITERIA	STIPEND	YEAR
1	20071A6604	Bhavana A	III-B.TECH- AIML	JP-MORGAN	70000	2022
2	20071A6611	Thanvitha D	III-B.TECH- AIML	JP-MORGAN	70000	2022
3	20071A6614	G SaiTeja	III-B.TECH- AIML	JP-MORGAN	70000	2022
4	20071A6618	Satwik K	III-B.TECH- AIML	JP-MORGAN	70000	2022
5	20071A6630	M Krishna Priya	III-B.TECH- AIML	JP-MORGAN	70000	2022
6	20071A6630	M Krishna Priya	III-B.TECH- AIML	MICROSOFT	125000	2022
7	20071A6647	Haripriya S	III-B.TECH- AIML	JP-MORGAN	70000	2022
8	20071A6650	Shaik Sana S	III-B.TECH- AIML	JP-MORGAN	70000	2022
9	20071A6901	G Aishwarya	III-B.TECH- IOT	JP-MORGAN	70000	2022
10	20071A6915	D Sreeniketh	III-B.TECH- IOT	JP-MORGAN	70000	2022
11	20071A6921	Spandana J	III-B.TECH- IOT	FLIPKART	100000	2022 & 2023
12	20071A6923	K Srichandana	III-B.TECH- IOT	NMICPS-TIHAN-IIT-HYDERABAD(INTERNSHIP)	5000	2023
13	20071A6932	K Rohan	III-B.TECH- IOT	EMERTXE(INTERNSHIP)	UNPAID	2023
14	20071A6932	K Rohan	III-B.TECH- IOT	JP-MORGAN	70000	2023
15	20071A6939	M Kavya	III-B.TECH- IOT	JP-MORGAN	70000	2023
16	20071A6948	K Vasista	III-B.TECH- IOT	NMICPS-TIHAN-IIT-HYDERABAD(INTERNSHIP)	5000	2023
17	20071A6955	T Sahithi	III-B.TECH- IOT	NMICPS-TIHAN-IIT-HYDERABAD(INTERNSHIP)	5000	2023
18	20071A6956	T sahithi	III-B.TECH- IOT	JP-MORGAN	70000	2023
19	20071A6959	Y Sathwik	III-B.TECH- IOT	JP-MORGAN	70000	2023

INTERNSHIP

SNO	ROLL NUMBER	STUDENT NAME	SECTION	CRITERIA	STIPEND	YEAR
1	21071A6605	AYYALA SOMAYAJULA SAI	II- B.TECH- AIML-A	EMERTXE (INTERNSHIP)	UNPAID	2023
2	21071A6667	A HARSHINI REDDY	II.B.TECH- AIML	AMAZON	35000	2023
3	21071A66D8	C TEJASWI REDDY	II.B.TECH- AIML	AMAZON	35000	2023
4	21071A66D1	A PRAGNA	II.B.TECH- AIML	AMAZON	35000	2023
5	21071A6956	S RAMA SATYA SAI GAYATHRI	II- B.TECH- IOT	EMERTXE (INTERNSHIP)	UNPAID	2023

PLACEMENTS



FIRST PLACEMENT



Congratulating Mr V.Madhu CSE-IoT for getting placed in Darwinbox. The first placement of the department. This achievement marks a significant milestone for the department, as it signifies our very first successful placement. Mr. Madhu's achievement showcases the high caliber of talent and education within our department, and we take immense pride in his success. We look forward to witnessing more of our students reach remarkable milestones in their careers and set new standards of excellence.

HIGHEST PACKAGE



M. Krishna Priya, a final year student-AIML recently accomplished a remarkable feat with an impressive starting package of 49 lakhs per annum. Following her successful summer internship with Microsoft, she secured a full-time position with the company, marking a significant milestone in her career. , Krishna Priya's achievement underscores her exceptional skills and the value of her education.



PLACEMENTS



VALLURUPALLI NAGESHWARA RAO
VIGNANA JYOTHI INSTITUTE OF ENGINEERING & TECHNOLOGY
Department of CSE- Artificial Intelligence & Machine Learning And
Internet of Things

Congratulations

FOR GETTING PLACED IN

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Ms. D. Tharvitha
Roll No : 2007IA6605

Mr. Sathwik
Roll No : 2007IA6608

Ms. S. Haripriya
Roll No : 2007IA6647

Ms. Sana
Roll No : 2007IA6650

Mr. G. Saiteja
Roll No : 2007IA6957

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Mr. K. Rohan
Roll No : 2007IA6932

Ms. M. Kavya
Roll No : 2007IA6959

Ms. T. Sathithi
Roll No : 2007IA6955

Mr. Y. Sathwik
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CONGRATULATIONS

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Department of CSE- Artificial Intelligence & Machine Learning And
Internet of Things

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Mr. M. Harikesh
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Mr. T. Anthyush
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Ms. K. Manasa
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Department of CSE- Artificial Intelligence & Machine Learning And
Internet of Things

CONGRATULATIONS

FOR GETTING PLACED IN

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Ms. K. Sai Deepthi
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Roll No : 2007IA6927

Mr. Sufian Shaik
Branch : CSE- Internet of Things
Roll No : 2007IA6954

Internship with Rs. 30,000/- PM
&
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Department of CSE- Artificial Intelligence & Machine Learning And
Internet of Things

CONGRATULATIONS

FOR GETTING PLACED IN

Deloitte.

With CTC

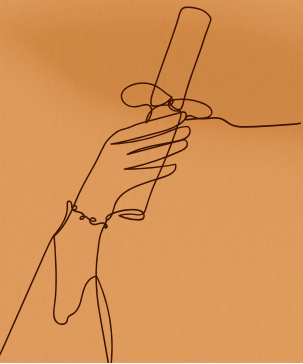
7.6 LPA

Ms. C. Vaishnavi
CSE- AIML
2007IA6602

Ms. N. Ritshika
CSE- AIML
2007IA6603

Mr. P. Sudheep
CSE- AIML
2007IA6606

Ms. S. Gayathri
CSE- AIML
2007IA6603





PLACEMENTS DATA

S.NO	ROLL NO	STUDENT NAME	BRANCH	PACKAGE	OFFERS
1	20071A6957	SEMBADI MADHU	IOT	16 LPA	DARWINBOX
2	20071A6604	ATHINA BHAVANA	AIML	19.75LPA	JPMC
3	20071A6611	DATLA THANVITHA	AIML	19.75LPA	JPMC
4	20071A6618	K SATWIK	AIML	19.75LPA	JPMC
5	20071A6647	S HARIPRIYA	AIML	19.75LPA	JPMC
6	20071A6650	SHAIK SANA SIDDIQA	AIML	19.75LPA	JPMC
7	20071A6657	THOTAMALLA ABHIRAM	AIML	19.75LPA	JPMC
8	20071A6901	AISHWARYA GRANDHI	IoT	19.75LPA	JPMC
9	20071A6915	DEVARINTI SREENIKETH REDDY	IoT	19.75LPA	JPMC
10	20071A6932	KURELLA ROHAN	IoT	19.75LPA	JPMC
11	20071A6939	MIRIYALA KAVYA NAGA DURGA LAKSHMI	IoT	19.75LPA	JPMC
12	20071A6955	TUMPUDI SRI SAHITHI	IoT	19.75LPA	JPMC
13	20071A6959	YAMSANI SATHWIK	IoT	19.75LPA	JPMC
14	20071A6921	JILLA SPANDANA	IoT	32.5LPA	FLIPKART
15	20071A6613	G HEMANTH VARMA	AIML	11.5LPA	CHUBB
16	20071A6629	MANCHALA HARIKESH	AIML	11.5LPA&19.2LPA	CHUBB, ORACLE
17	20071A6655	TALLURI ANTHYUSH	AIML	11.5LPA	CHUBB
18	21075A6601	KANDA MANASA	AIML	11.5LPA	CHUBB
19	20071A6927	KATTA SAI DEEPTHI	IoT	11.5LPA	CHUBB
20	20071A6954	SUFIAN SHAIK	IoT	11.5LPA	CHUBB



Student Activity



Students attended
INNOVATION DAY
at
IIT HYDERABAD



IoT students performance in street play as
part of English Communication Course
Based Project

AIML & IoT

BATCH-1



BATCH-2





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