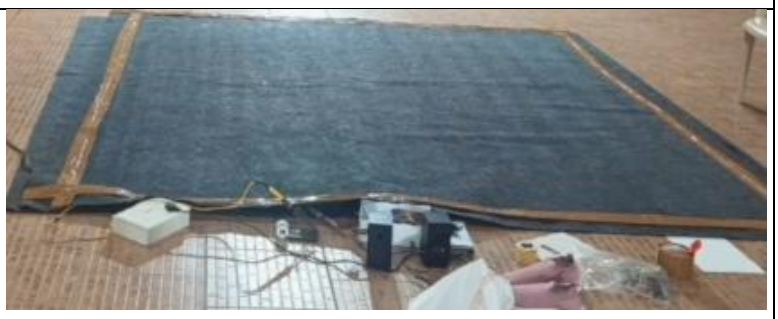
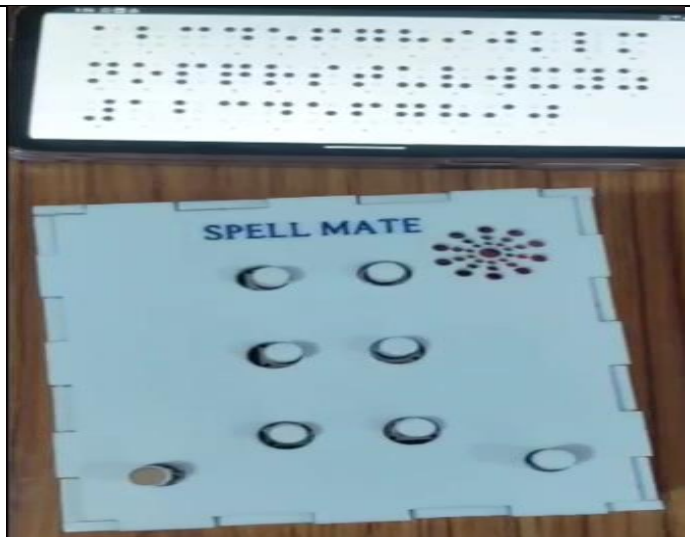
TRAINING / RESEARCH OR ACADEMIC PROJECTS

Details of Bridge Course in ATL Lab (2025-26)

S. No.	Course	Facilitator	Department	Date	Venue
1.	About ATL	Dr. K. Padma Vasavi	ECE	29-07-2025	ATL LAB
2.	Design Thinking and Innovation	Dr. D. Ramesh Varma	ECE	30-07-2025	ATL LAB
	Digital Electronics	Dr. G. Challaram	ECE	31-07-2025	ATL LAB
3	Arduino Programming	Mrs. M. Hema Latha M. Prashanth Kumar Ch. Santhosh	ECE	01-08-2025 02-08-2025	ATL LAB
5.	Basics of Electronics	Mr. D. Girish Kumar	ECE	04-08-2025	ATL LAB
6.	Actuators, Batteries and Power Management	Dr. A. Siva Mr. B. Mahendra Chand	EEE	05-08-2025 06-08-2025	ATL LAB
7.	CAD for Packaging 2D CAD 3D CAD	Mrs. P. Lavanya Mr. A.S.V.Prasad	CE ME	07-08-2025 09-08-2025	ATL LAB
8.	Product Development	Dr. K. Padma Vasavi	ECE	11-08-2025	ATL LAB
9.	Web Page Development	Mr.A.Nageswara Rao & Mr.T.Rajesh	CSE	12-08-2025	ATL LAB
10.	Mobile App Development	Mrs G Kalyani Mr K.Ram Kumar	AI IT	13-08-2025	ATL LAB

ATL Lab Projects (2025-26)

S.No.	Project Title	Description	Prototype
1	ECHOMAT	A kabaddi Game for Visually Challenged People	
2	PAGE VOICE	Convert text in page into voice for Visually Challenged People	
3	CURRENCY DETECTION	Detect currency notes to help visually Challenged People	

4	SPELLMATE	Interactive Spelling Game for visually challenged students	
5	BRAILLINK	Braille training for visually challenged students	
6	BRAILLE EASE	Refreshable Braille display	

7	EYENOVA	Object detection for visually Challenged people	
8	BAROVOICE	Barcode and QR Code reader for visually challenged people	

9	MEDI SENSE	Medicine name recognizer for visually challenged people	
10	BEEP BASE BALL	Beep Baseball game for visually challenged people	

11	EDUPLAY BOARD	Interactive board game for training Braille to visually challenged people	

ATL SELECTED STUDENTS (2025-26)

S.No	Roll No	Branch	Student Name
1	23B01A0424	ECE	Chitrada Rupasri Valli Sai Deepthi
2	23b01a0458	ECE	KOLA NAGA SUSHMA SRI
3	23B01A04B0	ECE	Venkata Sujitha Singaraju
4	23B01A04C0	ECE	Valluri Sravya Lakshmi Tulasi
5	23B01A0404	ECE	Alluri Varshitha Varma
6	23b01a0426	ECE	Davala Manasa
7	23B01A0446	ECE	Kambhampati Sohana N P L Sri Lalitha
8	23b01a0480	ECE	Nelakurthi Navya
9	23B01A0487	ECE	P.Jaya Lakshmi Kala
10	24B05A0409	ECE	PRAGADA LIKHITHA BHAVANI
11	23b01a0432	ECE	Garikipati Bhavadharani
12	23B01A0439	ECE	I supraja
13	23B01A0473	ECE	Masina Padmini Chowdary
14	23b01a04c3	ECE	V Damini Siri
15	23B01A0431	ECE	G. Geetha sri
16	23b01a0455	ECE	Satya Gayathri Kaveti
17	23B01A0479	ECE	NeelimaTammineni
18	23B01A0493	ECE	Penumatsa Aasritha Ramani
19	23B01A0447	ECE	Kancharala Yamini Satya Ganga Bhavani
20	24B05A0412	ECE	Verramalla Anitha
21	23B01A0148	CE	Uttaragiri Bhavani Venkata Naga Lakshmi
22	23B01A0317	MECH	J. Eekshitha Sai
23	23B01A12A4	IT	Chaturya Maragani
24	24B05A1211	IT	Oruganti Jhansi
25	23B01A1295	IT	Machavarapu Devi nagatulasi
26	23B01A0204	EEE	Bade Devi Latha
27	23B01A0208	EEE	Chavakula Divya Surya Teja Sri
28	23B01A0215	EEE	Sivani Eepuri
29	23B01A0220	EEE	Sowjanya Kadali
30	23B01A0238	EEE	Penmetsa Amruthavarshini
31	23B01A0207	EEE	Challa Sri Bharathi Amulya
32	23B01A4528	AI&DS-A	EELI UDAYA LAKSHMI

33	23B01A4524	AI&DS -A	Dekka Jahnvavi
34	24b05a4504	AI&DS-A	Chavvakula Jyothi sri
35	23B01A4245	AI&ML-A	Gudivaka Veda Bhavishya
36	23B01A42B9	AI&ML -B	Sirvisetti D L T S S Samhita
37	23B01A4269	AI&ML-B	Malapati Thanushka
38	23b01a0554	CSE	Gangavarapu Jaya Sri Durga
39	23B01A0562	CSE	Gundemeda Bindu
40	23B01A549	CSE	Evali Harshitha
41	24B05A4601	CSE-CS	Chaitanya Mani Buddigina
42	23B01A4631	CSE-CS	Kondapalli. Amrutha Valli
43	23B01A4651	CSE-CS	Sade Madhurima

CLIENT VISIT REPORT:

Date: 23-08-2025

Location: Zion School, Rajahmundry,A.P

Participants: ATL 43 students, 5 ATL Mentors and 2 supporting staff from ATL

The purpose of this visit was to provide students with real-time exposure to community-based learning and to identify potential assistive technology needs in educational and healthcare environments. The visit helped students understand real-world challenges and develop empathy-driven design thinking skills.

Objectives:

The primary objectives of our visit were as follows:

1. To understand the challenges and needs faced by individuals in real-life learning and rehabilitation settings.
2. To explore opportunities for developing assistive projects to improve accessibility and learning outcomes.

Itinerary:

The visit took place on 23-08-2025 and lasted for approximately 6 hours. The itinerary for the day was as follows:

9:00 AM: Students assembled at C Block parking area and departed for Rajahmundry.

12:30 PM: Arrival at the destination and warm welcome by the host institution.

1:00 PM: Interaction sessions with faculty, staff, and students.

2:30 PM: Group discussion on assistive technology project opportunities.

5:30 PM: Departure and return to college.

Interaction Activities: Upon arrival, the team was greeted warmly by the staff and students. The participants had the opportunity to interact with the students, observe their learning environment, and understand the kind of challenges they face in daily life. The mentors guided the students in identifying project themes that align with the Assistive Technology Lab's objectives.

The visit was highly insightful, fostering awareness and compassion among students while encouraging them to apply their engineering knowledge to real-world social impact.

Photographs:


GPS Map Camera
Rajahmundry, Andhra Pradesh, India
37-3-12, T Nagar, Innespeta, Rajahmundry, Andhra Pradesh 533101, India
Lat 16.991872° Long 81.778628°
23/08/2025 01:30 PM GMT +05:30
Google


GPS Map Camera
Rajahmundry, Andhra Pradesh, India
37-3-12, T Nagar, Innespeta, Rajahmundry, Andhra Pradesh 533101, India
Lat 16.991845° Long 81.77878°
23/08/2025 01:22 PM GMT +05:30
Google

International Day of Persons with Disabilities Day – Event Report

Date: 03-12-2025
Venue: Smt. B. Seetha Indoor Auditorium, SVECW, Bhimavaram
Participants: ATL student teams, ATL mentors, faculty members, supporting staff, beneficiaries, and invited guests

Purpose of the Event

The event was organized on the occasion of the International Day of Persons with Disabilities to showcase and distribute assistive technology solutions developed by ATL students. The programme aimed to promote inclusion, accessibility, and social responsibility through technology-driven solutions addressing real-life challenges faced by persons with disabilities.

Objectives

- To create awareness about assistive technologies and their societal impact.
- To provide practical, user-centric assistive solutions to beneficiaries.
- To encourage students to design empathy-driven and inclusive engineering solutions.
- To facilitate interaction between beneficiaries, experts, and student innovators.

Programme Schedule

- Prayer
- Lighting of the Lamp
- Welcome Address
- Felicitation to the Chief Guest
- Address by the Chief Guest
- Felicitation to the Guest of Honor
- Address by the Guest of Honor
- Cultural Programmes by beneficiary school students
- Distribution of ATL Assistive Products to beneficiaries
- Vote of Thanks

Chief Guest and Dignitaries

- **Chief Guest:** Dr. K. Madhu Murthy, Chairman, AP State Council for Higher Education
- **Guest of Honor:** Dr. U. V. Ramana Raju, Managing Trustee, Centre for Visually Challenged, Bhimavaram
- **Presided by:** Sri. K. V. Vishnu Raju, Chairman, Sri Vishnu Educational Society, Bhimavaram

Event Proceedings

The programme commenced with a prayer followed by the ceremonial lighting of the lamp by the dignitaries. The welcome address highlighted the role of the Centre for Assistive Technology in developing inclusive solutions. The Chief Guest and Guest of Honor addressed the gathering, emphasizing the importance of empathy-driven innovation and the responsibility of engineers toward society.

Cultural programmes performed by beneficiary school students added vibrancy to the event and reflected the spirit of inclusion. The key highlight of the programme was the distribution of assistive technology products designed and developed by ATL student teams.

Assistive Technology Projects Distributed

The following assistive solutions were demonstrated and distributed during the event:

1. E-Sticks-10
2. India Map – 2
3. World Map – 2
4. State Map – 2
5. AP Districts Map-2
6. Medical Dispenser
7. Object Detection System (for visually impaired)
8. Assistive Bike

These projects were developed by ATL students with continuous guidance from ATL mentors, focusing on usability, safety, and real-world application.

Media Coverage

The event received media attention and was covered by a leading regional newspaper, highlighting the distribution of assistive devices and the institution's commitment toward empowering persons with disabilities.

ఈనాడు
epaper.eenadu.net

పరికరాల అందజేత అభినందనీయం

భీమవరం పట్టణం, న్యూస్‌టుడే: విష్ణు కళాశాలలు విశ్వవిద్యాలయంగా రూపాంతరం చెంది మరింత సేవ చేయాలని ఆంధ్రప్రదేశ్ స్టేట్ కౌన్సిల్ ఆఫ్ హయ్యర్ ఎడ్యుకేషన్ ఛైర్మన్ ప్రొఫెసర్ కె.మధుమూర్తి అన్నారు. విభిన్న ప్రతిభావంతుల దినోత్సవాన్ని పురస్కరించుకుని భీమవరంలోని శ్రీవిష్ణు ఎడ్యుకేషనల్ సొసైటీలో కె.విజయలక్ష్మికి రూ.1.20 లక్షల విలువైన ట్రైబైక్, రాజమహేంద్రవరానికి చెందిన సెంటర్‌ఫర్ విజువల్లీ ఛాలెంజ్‌డ్‌లో చదువుతున్న విద్యార్థులకు ఈ స్టిక్‌లు, ప్రపంచ, దేశ, రాష్ట్ర ఎలక్ట్రానిక్ మ్యాప్‌లు, మెడికల్ డిస్పెన్సర్, ఆబ్జెక్ట్ డిటెక్షన్ తదితర వాటిని అందజేశారు. కళాశాల విద్యార్థులు తయారు చేసిన పరికరాలను ఏటా ఉచితంగా పంపిణీ చేయడం అభినందించదగిన విషయమన్నారు. శ్రీవిష్ణు ఎడ్యుకేషనల్ సొసైటీ ఛైర్మన్ కె.వి.విష్ణురాజు, సెంటర్ ఫర్ విజువల్లీ ఛాలెంజ్‌డ్ మేనేజింగ్ ట్రస్టీ యు.వి.రమణరాజు పాల్గొన్నారు.

ట్రై బైక్‌ను అందించిన ప్రొఫెసర్ మధుమూర్తి, విష్ణురాజు

Date : 04/12/2025 EditionName : ANDHRA PRADESH(WEST GODAVARI)
PageNo :

Outcome of the Event

- Beneficiaries received functional assistive devices addressing mobility, learning, and daily living challenges.
- Students gained hands-on experience in designing solutions with social impact.
- The event strengthened collaboration between the institution, community organizations, and beneficiaries.

- Awareness on inclusive technology and accessibility was enhanced among participants.

The Assistive Technology Day event organized on 03-12-2025 was a meaningful and impactful initiative. It successfully combined technical innovation with social responsibility, reinforcing the institution's commitment to inclusive education and community engagement. The event inspired students to continue developing assistive solutions that improve quality of life for persons with disabilities.

Photographs


Dr.
fascino


fascino


MEDISENSE
Motivation
Methodology
Block Diagram


OBJECTIVE
BLOCK DIAGRAM
RESULT
Motivation
Block Diagram


OBJECTIVE
PROGRESS


ASSISTIVE TECHNOLOGY CENTRE OF EXCELLENCE
16TH ATL PRODUCT DISTRIBUTION EVENT
on
INTERNATIONAL DAY OF
PERSONS WITH DISABILITIES
03rd December, 2025
VISHNU

ATL OUTCOMES (2025-26)

IIC REGIONAL MEET 2025 VIJAYAWADA

VoxDot is an assistive technology project developed to improve accessibility and independence for visually impaired individuals. Many visually impaired students rely on Braille for learning, but existing Braille printers are expensive, bulky, and not easily available in schools or rural areas. Because of this, users often depend on teachers, friends, or volunteers to convert information into Braille, which delays access to study materials and limits independent learning. To address this problem, VoxDot is designed as an affordable voice-controlled Braille printing device that converts spoken words directly into printed Braille. The system captures voice input through a Bluetooth-enabled Android application, converts it into text, and then translates it into Braille. An Arduino-based microcontroller system controls a solenoid-based mechanism and motor driver to generate Braille dot patterns on paper. This allows users to instantly convert voice into Braille and print notes independently. The device is portable, easy to operate, and cost-effective, enabling visually impaired users to access information without relying on others. It supports inclusive education by helping students receive learning materials quickly and independently. The primary users include visually impaired individuals, blind schools, special education institutions, NGOs, libraries, and caregivers. The estimated production cost per unit is around ₹15,853, with additional recurring costs of about ₹1,660, while the device can be sold for approximately ₹20,750, making it more affordable than many existing Braille printers. The project also has potential partnerships with blind schools, NGOs, and government initiatives such as AICTE and CSR programs to expand its reach.


HATCHLAB
SRM
IIC
REGIONAL MEET 2025
VIJAYAWADA
December 02, 2025

Innovation Project Fair at Jawaharlal Nehru Technological University Kakinada

An Innovation Project Fair was organized at Jawaharlal Nehru Technological University Kakinada to encourage students to showcase creative ideas and technological innovations. The event brought together students from various engineering colleges to present projects addressing real-world problems through technology and research. Our team participated in the fair by presenting the project “BrailleEase”, a device designed to convert digital text into Braille characters to make digital content accessible for visually challenged individuals.

The chief guest of the event was Nara Lokesh, Minister for Information Technology, Electronics & Communications and Human Resource Development, Government of Andhra Pradesh. During the event, he interacted with students, observed the innovative projects, and appreciated the efforts of young engineers in developing solutions that can benefit society. His presence motivated students to focus on innovation, entrepreneurship, and technology-driven development.

The exhibition provided a valuable platform for students to demonstrate their technical skills, creativity, and problem-solving abilities. Our project BrailleEase received positive feedback from visitors and faculty members for its social impact and potential to improve accessibility for visually challenged people.

Overall, the Innovation Project Fair was an inspiring experience that encouraged students to pursue innovative ideas and contribute to technological advancement for societal benefit.

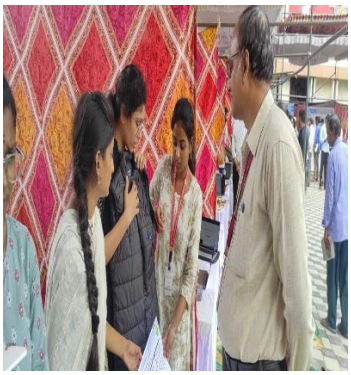

SHRI VISHNU ENGINEERING COLLEGE FOR WOMEN(A)
4
BONAM VENKATA CHALAMAY


REDDY BALI REDDY COLLEGE OF ENGINEERIN

AVISHKANDHRA

ATL teams visited the Regional Technology and Innovation Hub (RTIH), Rajamahendravaram to present and demonstrate our innovative projects aimed at solving real-world societal problems using technology. The visit provided us with an opportunity to interact with experts, present our ideas, and receive valuable feedback that could help us improve our projects and explore their real-world applications. During the visit presented two projects developed by our team: DripTrack – Smart Saline Monitoring System and SheShield – Women Safety Wearable Device.

DripTrack is a smart healthcare monitoring system designed to improve patient safety in hospitals. In hospital wards, nurses and medical staff often have to monitor the saline bottles of multiple patients simultaneously. Manually checking the saline level every few minutes can be difficult and time-consuming. If a saline bottle becomes empty and it is not noticed in time, air may enter the patient's bloodstream, which can lead to serious health complications. To overcome this issue. DripTrack continuously monitors the weight of the saline bottle using a load cell sensor. When the saline level reaches a critical low point, the system automatically activates an alert using a buzzer and LED indicator so that nurses can replace the bottle in time. This system helps prevent potential risks and reduces the workload of healthcare staff.


The second project, SheShield, is a women's safety wearable device specially designed to protect mentally challenged women. It acts as a personal safety device that provides an instant response when there is unwanted physical contact in sensitive areas associated with bad touch. The device immediately sends the live GPS location of the victim along with captured images of the situation, which can also serve as evidence. For immediate attention, the device activates a flash and buzzer sound to alert nearby people. The special feature of this device is that it can be triggered

by a simple touch without requiring any manual interaction from the user. Although it is primarily designed for mentally challenged women, it can be useful for every woman in today's society.

The experts and mentors at RTIH appreciated the practical applications and social relevance of both projects. They also provided valuable suggestions regarding improvements and future implementation. The visit was a highly informative and motivating experience that encouraged us to further develop our ideas and work towards creating innovative solutions for society.

INNOVATION & INCUBATION CENTER INAUGURATION PROJECT EXPO AT RAJAHMUNDRY

Our team had the valuable opportunity to present our innovative student projects during an interaction with Nara Lokesh Sir in Rajamahendravaram. The meeting provided us with a platform to showcase our ideas and explain how technology can be used to solve real-world societal problems. It was an inspiring experience that allowed us to receive encouragement and recognition for our innovative work. During the interaction, we presented two of our projects: DripTrack – Smart Saline Monitoring System and SheShield – Women Safety Wearable Device.

DripTrack is designed to enhance patient safety in hospitals by continuously monitoring the saline bottle level. In hospital wards, nurses often need to monitor multiple patients at the same time, which makes it difficult to manually check every saline bottle regularly. If a saline bottle becomes empty and it is not noticed in time, air may enter the patient's bloodstream and lead to serious health complications. DripTrack addresses this issue by using a load cell sensor to measure the weight of the saline bottle and continuously monitor the fluid level. When the saline reaches a critical low level, the system automatically activates a buzzer and LED alert so that medical staff can replace the bottle immediately, thereby preventing possible risks.

The second project, SheShield, is a women's safety wearable device specially designed to protect mentally challenged women. It acts as a personal safety device that provides an instant response when there is unwanted physical contact in sensitive areas associated with bad touch. The device immediately sends the live GPS location of the victim along with captured images of the situation,

which can serve as evidence. To attract immediate attention, the system also generates a flash and buzzer sound. The special feature of this device is that it can be triggered by a simple touch without requiring any manual interaction from the user. Although it is primarily designed for mentally challenged women, it can also serve as a protective device for women in general.

During the interaction, Nara Lokesh Sir appreciated the innovative ideas and the social relevance of our projects. He encouraged students to focus on developing practical technological solutions that address real societal challenges. The meeting was highly motivating and inspired us to continue working on innovative projects that can contribute positively to society.