



MALINENI LAKSHMAIAH

WOMEN'S ENGINEERING COLLEGE

(AUTONOMOUS)

(Accredited by "NBA" & NAAC A+ Grade | Approved by AICTE, New Delhi & Affiliated to JNTUK, Kakinada)
Pulladigunta (Vil), Vatticherukuru (Md), Prathipadu Road, Guntur – 522 017 A.P.



INTERNAL QUALITY ASSURANCE CELL (IQAC)

ANNUAL REPORT

Academic Year 2024–25

PREFACE

The Internal Quality Assurance Cell (IQAC) of **Malineni Lakshmaiah Women's Engineering College (Autonomous)** continues to function as the institutional mechanism for quality sustenance and enhancement. During the academic year 2024–25, the IQAC focused on strengthening Outcome-Based Education, promoting research and innovation, improving employability, enhancing infrastructure, and ensuring continuous quality improvement in academic and administrative processes.

This report presents the major quality initiatives, achievements, and institutional progress made during the academic year 2024–25.

1. INSTITUTIONAL PROFILE

Name of Institution

Malineni Lakshmaiah Women's Engineering College (Autonomous)

Location

Pulladigunta, Vatticherukuru Mandal, Guntur District, Andhra Pradesh

Affiliation

Jawaharlal Nehru Technological University Kakinada

Accreditation Status

- NAAC Accredited with A+ Grade
- NBA Accredited Programs
- UGC Autonomous Institution
- ISO 9001:2015 Certified Institution

Principal

Dr. J. Appa Rao

IQAC Coordinator

Dr. Chiluka Ramesh

2. VISION

To emerge as a premier institution for engineering education by empowering women through academic excellence, innovation, ethical values, leadership qualities, and societal commitment.

3. MISSION

- To provide quality technical education.
- To strengthen industry-academia interaction.
- To encourage research, innovation, and entrepreneurship.
- To nurture ethical values and social responsibility.
- To promote lifelong learning among students and faculty.

4. IQAC OBJECTIVES

The IQAC strives to:

- Institutionalize quality enhancement practices.
- Develop quality benchmarks.
- Promote innovative teaching-learning methodologies.
- Facilitate research and consultancy.
- Strengthen stakeholder participation.
- Support accreditation and ranking activities.
- Promote academic excellence and employability.

5. IQAC COMPOSITION

The IQAC consists of:

- Principal – Chairperson
- IQAC Coordinator
- Senior Administrative Officers
- Faculty Representatives
- Management Representative

- Industry Representative
- Employer Representative
- Alumni Representative
- Student Representatives
- External Academic Experts

The composition ensures active participation of all stakeholders in quality enhancement initiatives.

6. MAJOR IQAC INITIATIVES DURING 2024–25

Academic Quality Enhancement

- Continuous monitoring of OBE implementation.
- Academic and Administrative Audits.
- Strengthening of Mentor-Mentee System.
- Course Outcome Attainment Analysis.
- Student Feedback Analysis and Corrective Measures.

Research Promotion

- Encouragement for publication in Scopus and WoS journals.
- Patent filing support.
- Faculty research incentives.
- Research methodology workshops.

Employability Enhancement

- Placement Training Programs.
- Industry Certification Courses.
- Internship Opportunities.
- Soft Skill and Communication Skill Development.

7. TEACHING–LEARNING PROCESS

The institution adopted innovative pedagogical practices including:

- Experiential Learning
- Participative Learning
- Project-Based Learning
- ICT-Enabled Teaching
- Flipped Classrooms

- Peer Learning
- Problem Solving Approaches
- Technical Seminars
- Industrial Visits

ICT Infrastructure

- ICT-enabled classrooms and seminar halls -42
- Smart classrooms with LCD projectors.
- Learning Management Systems.
- NPTEL and MOOCs integration.

These initiatives significantly enhanced student engagement and learning outcomes.

8. OUTCOME BASED EDUCATION

The institution continued effective implementation of Outcome-Based Education.

Major Activities

- CO-PO-PSO Mapping.
- Direct and Indirect Assessment.
- Course End Surveys.
- Gap Analysis.
- Attainment Review Meetings.

Outcome

Improved Course Outcome and Program Outcome attainment levels across all departments.

9. RESEARCH, INNOVATION AND DEVELOPMENT

Research activities witnessed significant growth during 2024–25.

Research Performance

Particulars	2024–25
Research Publications	28
Books/Book Chapters	12
Patents Filed	6
Patents Published	4
Faculty Pursuing Ph.D	10

Particulars	2024–25
Research Scholars Registered	6

Research Promotion Activities

- FDPs on Research Methodology.
- IPR Awareness Programs.
- Entrepreneurship Workshops.
- Innovation Challenges.
- Hackathons and Ideathons.

10. ENTREPRENEURSHIP AND INNOVATION

The Institution Innovation Council (IIC), Entrepreneurship Development Cell, and Incubation Centre actively promoted innovation.

Major Activities

- Startup Awareness Programs.
- Business Model Competitions.
- Prototype Development Workshops.
- Design Thinking Sessions.
- Entrepreneurship Boot Camps.

Outcome

Students actively participated in innovation activities leading to prototype development and startup ideation.

11. STUDENT SUPPORT AND PROGRESSION

Scholarships

Category	Beneficiaries
Government Scholarships	1792
Institutional Scholarships	112

Capacity Building Programs

Students were trained in:

- Soft Skills

- ICT Skills
- Communication Skills
- Life Skills
- Competitive Examination Preparation

Beneficiaries

More than 1150 students benefited from career guidance and skill development programs.

12. PLACEMENTS AND HIGHER EDUCATION

Placement Statistics

Particulars	Count
Students Placed	232
Highest Package	₹8.5 LPA
Average Package	₹4.2 LPA

Major Recruiters

- TCS
- Infosys
- Wipro
- Accenture
- Cognizant
- Capgemini
- HCL

Higher Education

Students pursuing higher education: 8

Competitive Examinations

Students qualified in GATE, GRE, CAT, and Government examinations: 8

13. INDUSTRY INTERACTION AND COLLABORATION

The institution strengthened industry partnerships.

Achievements

Particulars	Count
Functional MoUs	18

Particulars	Count
Collaborative Activities	45
Internships Completed	420
Industry Experts Invited	35

Activities Conducted

- Guest Lectures
- Industrial Visits
- Internship Programs
- Industry Certifications
- Faculty Internships

14. EXTENSION ACTIVITIES AND SOCIAL RESPONSIBILITY

The NSS Unit actively engaged in community outreach.

Major Activities

- Blood Donation Camps
- Swachh Bharat Campaigns
- Health Awareness Programs
- Tree Plantation Drives
- Women Empowerment Programs
- Village Adoption Activities

Statistics

Particulars	Count
Extension Activities	30
Student Participants	750
Awards/Recognitions	10

15. INFRASTRUCTURE DEVELOPMENT

The institution continuously upgraded its infrastructure.

Physical Facilities

- Classrooms : 34
- Seminar Halls : 4

- Laboratories : 55
- ICT Enabled Classrooms : 42

16. LIBRARY AND LEARNING RESOURCES

The library continues to serve as a major learning resource.

Facilities

- KOHA Automation
- DELNET Membership
- J-Gate
- National Digital Library
- NPTEL Resources
- E-Journals and E-Books

Statistics

Particulars	Value
Library Users per Day	180
E-Journals Accessed	2100+
Expenditure on Books & Journals	₹6.5 Lakhs

17. IT INFRASTRUCTURE

The institution strengthened IT facilities.

Highlights

- Total Computers : 820
- Internet Bandwidth : 500 Mbps
- Campus-wide Wi-Fi
- CCTV Surveillance
- Cloud-Based Academic Services

The upgraded IT infrastructure significantly improved academic and administrative efficiency.

18. BEST PRACTICES

Best Practice I

Employability Enhancement through Industry-Oriented Training

Activities:

- Placement Training
- Internship Programs
- Industry Certifications
- Mock Interviews

Outcome:

Improved placement percentage and professional competencies.

Best Practice II

Innovation Ecosystem for Women Engineers

Activities:

- Hackathons
- Ideathons
- Startup Competitions
- Innovation Challenges

Outcome:

Enhanced creativity, entrepreneurship, and problem-solving abilities.

19. INSTITUTIONAL DISTINCTIVENESS

The institution's distinctive feature is empowering women through quality engineering education integrated with innovation, leadership, entrepreneurship, and ethical values.

The annual techno-cultural fest "Samskruthi 2025" provided a platform for students to showcase their technical, cultural, and leadership skills.

20. FUTURE PLAN OF ACTION (2025–26)

The IQAC proposes to:

1. Increase research publications in Scopus/WoS journals.
2. Enhance patent filing activities.
3. Strengthen industry-sponsored projects.
4. Improve NIRF ranking performance.
5. Expand international collaborations.

6. Increase startup and incubation activities.
7. Strengthen alumni engagement.
8. Improve placement opportunities.
9. Promote interdisciplinary research.
10. Continue quality enhancement initiatives.

CONCLUSION

The academic year 2024–25 witnessed remarkable progress in academics, research, innovation, employability, infrastructure, and community engagement. The IQAC played a pivotal role in institutionalizing quality assurance mechanisms and ensuring continuous improvement.

The institution remains committed to achieving excellence in technical education and empowering women engineers to contribute effectively to society.


IQAC Coordinator
IQAC

MALINENI LAKSHMAIAH
WOMEN'S ENGINEERING COLLEGE
PULLADIGUNTA, GUNTUR-522017


Principal

PRINCIPAL
MALINENI LAKSHMAIAH
WOMEN'S ENGINEERING COLLEGE
PULLADIGUNTA, GUNTUR-522017



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Pulladigunta(V), Vatticherukuru(M), Guntur(Dt), A.P.

Our College has won the following awards at AICTE-Eduskills Connect #New Delhi#

All India 9 Ranking (Under Engineering Category) for Internships Performance

Best Performing Engineering Institute-2024 (Internships)

Best Talent Excellence Connect (TPO) Award

Best Centre of Excellence Coordinator Award (Microchip COE)

Best Educator Award- PaloAlto to K.Sireesha mam, Dept of CSE

Best Educator Award - UIPath to M.Prathyusha mam, Dept of CSE

Best Educator Award- Blue Prism

#Certificate of Participation in World Book of Records(London) in association with Eduskills



ON

EduSkills Connect 2024
Transform . Together

EduSkills Summit 2024
Together . Transform . Future

WORLD OF R
L

Next GEN Skill Conclave

27 28 29 SEP, 2024 | Dr. Ambedkar International Centre | New Delhi





EduSkills Virtual Internship Rankings 2024: Engineering

Awarded to

**Malineni Lakshmaiah
Women's Engineering College
Andhra Pradesh**



(Under Engineering Category)

The ranking is based on Virtual Internship student completion of Cohort 7, 8 & 9
(1st December 2023 to 30th September 2024)

We express our sincere appreciation for your support in our mission of 'Building Digital Workforce of Tomorrow' by establishing an internship ecosystem at your esteemed Institute. Your contribution will undoubtedly create valuable opportunities for aspiring young professionals.



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Next GEN Skill Conclave

27-29 SEP 2024 | Dr. Ambedkar International Centre | New Delhi

Decorative flourish


**Best Performing Engineering Institute - 2024
(South - Central Zone)**

Decorative flourish

Awarded to

**Malineni Lakshmaiah Women's Engineering College
Andhra Pradesh**

*for exemplary contribution and outstanding performance in
EduSkills Center of Excellence (CoE) Programme*


Dr. Shubhajit Jagadev
Chief Executive Officer (CEO)
EduSkills





**WORLD BOOK
OF RECORDS**
LONDON

CERTIFICATE OF
PARTICIPATION

**Malineni Lakshmaiah Women's
Engineering College
Andhra Pradesh, India**

Has participated in
conducting "Five Lakh Internships in Three Years"
jointly organized by EduSkills Foundation and All India
Council for Technical Education (AICTE), Ministry of
Education, Government of India.

UID No. : WIX22796

Date : 27th September, 2024



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विज्ञान एवं प्रौद्योगिकी विभाग
DEPARTMENT OF
SCIENCE & TECHNOLOGY

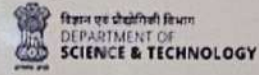
MAT
Driving AI Evolution, Shaping Tomorrow

MATH-MOU Signing





Supported by



Thought Leadership

Talentfarm.ai and MATH-Machine Learning and Artificial Intelligence
Technology Hub, a CoE supported by DST and T-Hub

Congratulates

Malineni Lakshmaiah Women's Engineering College

For being part of the

Global Ai Academic Alliance

launched on 17-05-2024 at T-Hub, Hyderabad



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Congratualtions to P.Likhitha, V.Sravani, V.Manasa, Sk.Manisha (Team Name-Brinay Bunches) from III-ECE Submitted their idea for HackAP Hackathon on Road Transport Logistics, conducted by A-Hub, @ Andhra University, Visakhapatnam and were selected as one among the Top 15 teams of India on 29-09-2024.





BEST PROJECTS

Batch No.	Roll No.	Students Name	Project Title
A-1	19KE1A0447	KOMMAREDDY GAYATHRI DEVI	Third eye for visually challenged.
	19KE1A0426	GUDE MADHAVI	
	19KE1A0429	GURRAM APEKSHA	
	19KE1A0455	KURRI ANUSHA	
A-2	19KE1A0408	BADIGANCHULA JYOTHSNA	Data uploading to web server.
	19KE1A0458	MALLISHETTI VENUKA	
	19KE1A0404	ANNA SIREESHA	
	19KE1A0440	KARNATI SWATHI	
A-7	19KE1A0421	GANDHAM PRIYANKA	Single flux quantum(SFQ) first in first out(FIFO) synchronizers.
	19KE1A0412	BAVIRSETTY LIKHITHA	
	19KE1A0428	GUNTUPALLI KEERTHI	
	19KE1A0417	DANDA RUCHITHA	
A-9	19KE1A0433	KADIRI SRIVIDYA	Portable robot to analysis of air pollution for crop protection using IOT.
	19KE1A0410	BEZAVADA ANURADHA	
	19KE1A0425	GUDA PAVANI	
	19KE1A0414	BUCHI SRILEKHA	
A-11	19KE1A0459	MANDATI HARIKA	Weather report streaming with graph analysis using IOT.
	19KE1A0402	AMIRNENI LAKSHMI KEERTHI	
	19KE1A0457	MALLADI LAKSHMI HARIKA	
	19KE1A0424	GOTTIPATI THRILOCHANA	
A-12	19KE1A0432	JAVVAJI NAGA LAKSHMI	Non invasive blood pressure remote monitoring instrument based microcontroller.
	19KE1A0422	GOGINENI ALEKHYA	
	19KE1A0423	GORANTLA ANUSHA	
	19KE1A0441	KATTA NAGALAKSHMI	
A – 14	19KE1A0448	KOMMAREDDY SRILAKSHMI	Manhole monitoring with fault detecting and reporting system for municipal department.
	19KE1A0401	ADDAGADDA TEJASRI	
	19KE1A0435	KAKUMANU TEJASWI	
	19KE1A0460	MANGAMURI PUJITHA	
	19KE1A0444	KETIREDDY CHINNA MANGAMMA	
B-1	19851A0416	RELLA PRASANTHI	Development of precision farming using multi node sensor
	19851A0406	DUDDUGUNTA MAOUNIKA	
	19KE1A04A9	YERRAMSETTY NAVYA	
	19KE1A0481	SAIMPU JYOTHI PRIYA	
B-3	19KE1A0497	TALLURI HARIKA	Constant time synchronous binary
	19KE1A0499	THOTA SRUJANA	



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Pulladigunta (V) Vatticherukuru (M), Guntur (Dist.)

	19KE1A0473	PARIMI SUKANYA	counter with minimal clock period.
	19KE1A0489	SIDDABATTINI BALA SAI SOWMAYA	
B-4	19KE1A0463	NAGALLA GREESHMA SREE	Real time Industrial process controlling and monitoring using mobile.
	19KE1A0467	NEELAM MANASA	
	19KE1A04A2	UPPUTURI DIVYA KRISHNA	
	20KE1A0403	REPURI KEERTHANA	
B-5	19KE1A0483	SHAIK AIESHA	Smart phone controlled robot.
	19KE1A0472	PANDILLA NANDINI	
	19KE1A04A1	TOOMATI ADI LAKSHMI	
	19KE1A04A6	VINNAKOTA VASANTHI	
B-8	19KE1A0465	NAPA ANANYA	Automated billing smart trolley and stock Monitoring system.
	19KE1A0475	PASUPELETI SIRISHA	
	19KE1A04A3	VAKA PRAVALLIKA	
	19KE1A0474	PASAM MANISHA	
B-9	19KE1A0491	SIRIGIRI BHARGAVI ANJALI KUMARI	Smart security fire detection and surveillance system using EPS32 cam.
	19KE1A04A8	YENUMULA SIRISHA	
	19KE1A0488	SHAIK ZAREENA WAHAVA BEGUM	
	20KE5A0401	BODDU NAGA SOWMYA	

Principal

(Dr. J.Apparao)

PRINCIPAL
MALINENI LAKSHMAIAH
WOMEN'S ENGINEERING COLLEGE
PULLADIGUNTA, GUNTUR-17



Smart phone controlled robot

The aim of this project is to develop a prototype of a smart phone-controlled robot that performs a various function in order to provide a very powerful and versatile robot while also reducing the hardware usage as much as possible. In this project, Arduino UNO is used as a central component, to which all the other components are interfaced. The designed robot is controlled wirelessly through a smart phone with the help of a Wi-Fi module. On detecting an obstacle, a notification is sent to the smart phone and the robot performs pick and place operation with the help of a robotic arm mounted onto the robot. A combination of Temperature sensor, Gas sensor and Fire sensors are used to provide explosion sensing and detection and a buzzer goes on with the detection of explosion prone region. Further, a live surveillance is provided to monitor every movement of the Robot.



Portable robot to analysis of air pollution for crop protection using IOT.

This Project aims at designing and executing the advanced development in communication system for Air pollution analysis and crop protection from animals that invaded to farms like cows, goat, elephants, etc. and the famers can't protect the entire farm by staying in farm for all day. We require a much more efficient device for better security a web controlled surveillance robot is much more practical device to be used compared to conventional security surveillance, and therefore soil moisture sensor detects moisture level in soil when it starts getting wet. It will be automatically starts water pump. However more amount of water in farm will spoil the crops so , servo motor opens the canal when heavy rain flows detected by rain sensor, added upon gas sensor is used to detect the fire in farm



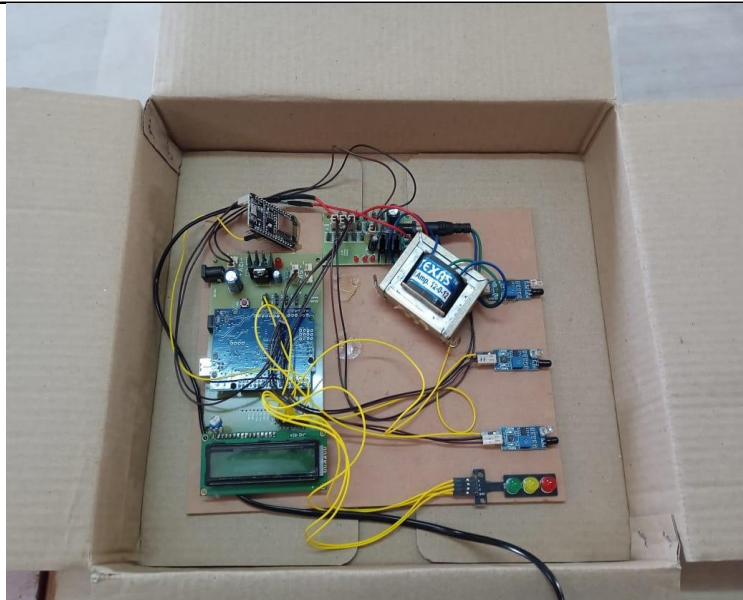
Real time Industrial process controlling and monitoring using mobile.

The project is aimed to design a real time industrial process monitoring and controlling system by using wireless communication technology GSM , using which the manual operations can be completely eliminated. In industries, there will be various machinery to be operated on the basis of the status of other machinery. For this purpose, a person should be employed to monitor the status of loads. But there may be chances that the person may forget to operate. and also it is not an easy task for a person to operate manually as these machines run with high currents and high power consumption. This project gives the best solution for those situations and also the manual operation will be completely eliminated. This application will be developed by using a wireless concept. Here we consider, one of the wireless communication systems, that is GSM communication system as it is very cheap and very easy to implement.



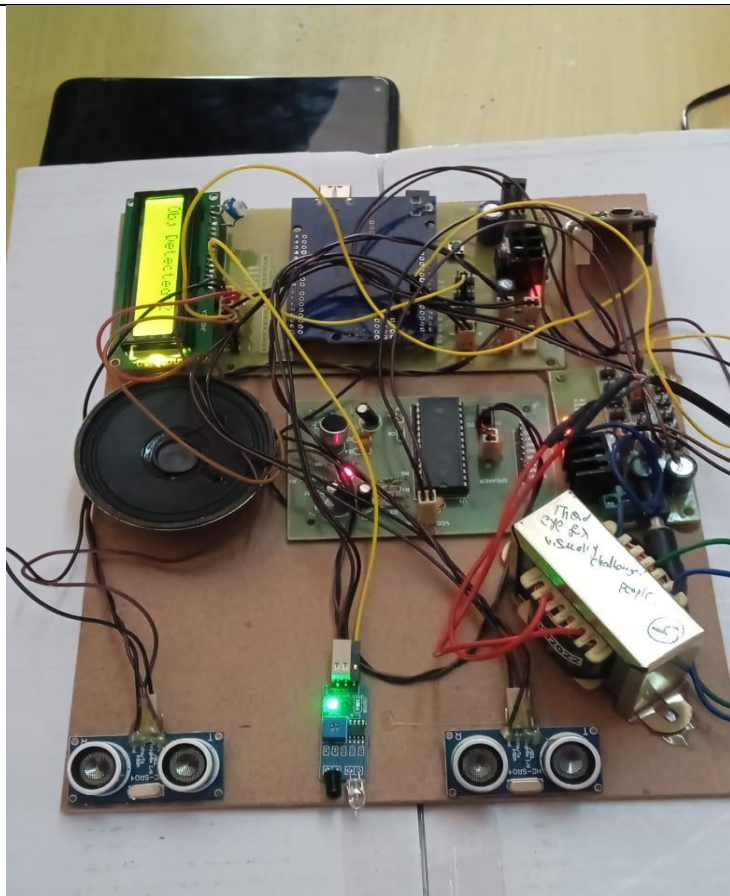
Weather report streaming with graph analysis using IOT.

Here we propose a smart weather reporting system over the internet. Our proposed system allows for weather parameter reporting over the internet. It allows the people to directly check the weather stats online without the need of a weather forecasting agency. System uses temperature, humidity as well as rain sensor to monitor weather and provide live reporting of the weather statistics. The system constantly monitors temperature using temperature sensor, humidity using humidity sensor and also for rain. The system constantly transmits this data to the microcontroller, which now processes this data and keeps on transmitting it to the online web server over a wifi connection. This data is live updated to be viewed on the online server system. Also system allows user to set alerts for particular instances, the system provides alerts to user if the weather parameters cross those values. Thus the IOT based weather reporting system provides an efficient internet based weather reporting system for users.



Smart security fire detection and surveillance system using ESP32 cam.

Fire is the most boundless reason for the unfortunate death influences for many occupants every year by causing many injuries and also an unprecedented increase in the death toll. The detection system is intended to keep away individual from the fire with an alarm during the crisis accompanied by sending the warning message to a telegram account with the identification of ESP32 movements via the web as a notification in a cell phone elsewhere it customizes the Arduino IDE. A Telegram bot can be developed for ESP32 with the association of PIR sensors by the movement of admonition message through a telegram account irrespective of any distinct movement. Fire sensors can recognize the image and temperature to produce an alarm via the telegram channel.



Third eye for visually challenged.

The millions of people in the world whose vision is not perfect and they wear glasses. But for those hundreds or thousands who are blind, existing methods that merely assist them are not just enough. What they need are alternative methods by which they can navigate with greater comfort, speed, and confidence. By taking these into consideration, a wearable prototype is designed using Echolocation Technology which can resolve the problems of the existing methods. Sensors like Ultrasonic Sensors and IR sensors are used for obstacle detection and water detection. All the sensors are interfaced with Arduino UNO for processing purposes. Thus, there is hope for the visually challenged people to traverse without a stick. They can simply wear the designed prototype as a headset or a cap which can work very accurately and the only thing required is some training to use it.



Data uploading to web server.

In this project client is our project and it is having basic inputs according to Customer. These basic inputs are digital or analog or both. Whenever input pins are trigger then Microcontroller detects these inputs and develop TCP stack with particular standard data Format. Microcontroller having 16X2 LCD and it displays I/Os Information. In the microcontroller these sensors are interfaced this controller inbuilt wifi module is there it directly upload the data to the web server .Finally we can see data in web server from anywhere in the world.



Development of precision farming using multi node sensor

Integration between Wireless Sensor Network (WSN) is widely used in many to build a support system to overcome any problem. Indonesia as an agriculture country which needs that technology to solve agriculture problem such as land monitoring, water treatment, etc. Precision farming based on WSN is described in detail especially in multi-node sensor configuration and the master station. In this research, the WSN system consists of the multi-node sensor which contains several sensors for each node, a controller and wireless module. A master station is built with Arduino UNO as the main computer. All data from node sensor will be displayed on the LCD. Communication between the master station and each node sensor through a wireless network based on X-bee board. The software operated in closed loop control to activate water treatment based threshold value from the sensor. The sensor data also displayed in server station based on the website and can be accessed in everywhere through an internet connection. A farmer can monitor updated sensor data using android application where installed in an android mobile phone.