



**TITLE OF PRACTICE:**

**“Artificial Intelligence  
and Robotics”**

**(AIR)**



**OFFICE OF THE DEAN ACADEMIC AFFAIRS  
RAJASTHAN TECHNICAL UNIVERSITY**

**AKELGARH, RAWATBHATA ROAD, KOTA-324010**

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RTU/Acad./F(17)14/2021/3157-61

Date: 22.02.2021

To  
Principal/Director  
Arya Institute of Engineering & Technology  
SP-40, Kukas Industrial Area (RIICO), Delhi Road  
Jaipur-302028

**Sub:** Recognition of Centre of Excellence in **Artificial Intelligence and Robotics (AIR)**.

**Ref.:** 1. University letter no. RTU/F(17)Acad./2020/1414-15, dtd. 30.09.2020.

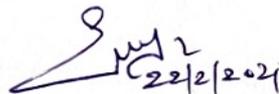
2. Your proposal dtd. 30.12.2020.

Sir

With reference to University call for proposals for establishment of Centre of Excellence, your application for recognition of Centre of Excellence in the area of **Artificial Intelligence and Robotics (AIR)** was considered. On the recommendation of Expert Evaluation Team and subsequent approval of 66<sup>th</sup> Board of Inspection vide agenda no. 66.3, University has recognised the Centre of Excellence in the area of **Artificial Intelligence and Robotics (AIR)** at your institute.

The modalities of operation for Centre of Excellence shall be communicated in due course of time.

Yours sincerely

  
(Prof. D.K. Palwalia)  
Dean, Academic Affairs



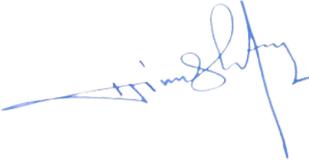
## OBJECTIVES OF PRACTICE

The primary objective of the practice of Artificial Intelligence & Robotics is to research, design, and develop advanced AI algorithms that can mimic human intelligence and behavior. **By this we are emerging as the Best Educational Institute in Rajasthan and Work for Excellence in imparting Quality Education to the Students to nurture their inherent talent as Innovative Technical Professional.** This involves exploring machine learning, deep learning, natural language processing, and other AI techniques to create intelligent systems capable of reasoning, learning, and adapting to new data.

Encouraging AI systems to continuously learn and improve is a crucial objective. This involves developing algorithms that can adapt to changing data and environments, enabling AI systems to stay relevant and effective over extended periods.

- To expose and showcase to students the latest technologies like **AIR, Automation, ML, LIDAR, Pneumatics, Drone, Mechatronics, Laser Cutting, Vacuum Forming, 3D Printing etc.** and to make them capable of solving real life problems.
- To create the **R&D** environment for students and faculties in the field of **AIR** and motivate them to do **the Innovations and Inventions.**
- To develop the new Software **likes ROS, Arduino (Mega, UNO, Nano) Programming, different types of Motors and Sensors programming into them.**
- To create the designs of the Robots and PCB (Printed Circuit Board) in the form of Gerber files.

The final objective is to educate the public and raise awareness about the capabilities and limitations of AI and robotics. This includes dispelling myths, promoting responsible AI use, and fostering a better understanding of the potential societal impact of these technologies.





## THE CONTEXT

AIET has a vision to *work for excellence in imparting quality education in emerging area* with objective to introduce **Artificial Intelligence and Robotics (AIR)** as a thrust area.

- Established AIR lab to fill the academia industry gap and extend an opportunity to the students to learn latest technologies like Robotics, Machine Learning (ML), AI, LIDAR, Drone, Mechatronics etc. And to prepare them for the 4.0 Industry revolution.
- **AIR** is the enhanced and advanced field of Engineering Science & Technology which helps the students to develop the skills like **Startup, Innovation, Incubation, Entrepreneurship and Creativity.**

**AIR lab** relies on the **STEM** learning Science Technology Engineering and Mathematics with the objective of developing student's logics and intellectual capacity.





## THE PRACTICE

The integration of "Artificial Intelligence & Robotics" into the Indian education system offers several unique advantages and challenges, given the specific context of the country:

- **Technological Leapfrogging:** The adoption of AI and robotics in education can allow the country to leapfrog traditional methods and bridge the gap between urban and rural education facilities.
- **Addressing Skill Gaps:** AI and robotics education can play a crucial role in addressing the skill gaps in the Indian workforce. By training students in emerging technologies, the education system can produce a workforce that is better equipped to handle the demands of a technology-driven job market.
- **Access to Quality Education:** AI-powered educational platforms can offer quality education to students in remote or underserved areas. With the help of technology, students can access educational resources and expert teachers they might not have had access to otherwise.
- **Teacher Support and Professional Development:** AI can assist teachers in various ways, such as automating administrative tasks, providing data-driven insights on student performance, and offering recommendations for personalized teaching strategies. This support can enhance teacher efficiency and effectiveness.
- **Research and Innovation:** Integrating AI and robotics in the Indian education system can foster research and innovation in these domains. It can encourage students and educators to explore new ideas, create technology solutions, and contribute to the global AI landscape.





AIET has been working in the fields of AIR for last 6 Years and has made many Industrial and Commercial Robots and related products like:

<b>Ruby Robot:</b> Humanoid Robot for Restaurant Serving Robot.	
<b>Robocop:</b> Humanoid Robot working as a Robocop based on Voice & Face Recognition, Command Based.	
<b>Nancy Robot:</b> Humanoid Robot for Hospital purpose.	
<b>Sopia Robot:</b> Query Answered Robot with the features of Voice recognition and AI.	
<b>Iglu Robot:</b> Robot for the Teaching and guiding purpose in Schools and Colleges.	
<b>Anti-Viral Robot:</b> UB Sterilization and disinfectant Robot for Schools, College, Hotels and Hospital purpose.	
Industrial Robotic Arm	Line and Wall Follower Robots
Bionic Hand	Spider Robot
Digital Stethoscope	Walk With Me Robot
AI Based Robotic Face.	Cheetah Robot
Hexapod	Robotic Arm with Gesture Control
Quad Copters	

For overall development of the student's college constantly giving the training to its students on latest Technology in its Artificial Intelligence and Robotic, R&D Innovative lab for integrating the knowledge of Robotics Operating System, LIDAR, SLAM, Robotics Manufacturing, ML, AI, Raspberry Pi, Arduino (Mega, UNO, Nano etc.), Computer programming (like Python, Embedded C etc.) in order to enhance the student skillset.



**AIR Lab** has the following Technologies and Machines:

LASER Cutting	Industrial Resin 3D Printer	Vacuum Forming
CNC Router	SMT Machine	Acrylic Bending
CNC Lathe	Wave Soldering	Metal Bending
Plasma Cutting	Deep Soldering	Drone Technology
Laser Welding	4-DOF Manipulator Kit	Portable Pneumatic Trainer

In addition to learning Robotics Engineering concepts and facts, students also learn and develop other valuable skills like **Team work, Creativity, Design, Problem Solving** and **Planning & Execution etc.** to improve the analytical approach.

#### Constraints Faced:

- **Teacher Training:** Integrating AI and robotics in education demands trained teachers who are well-versed in these technologies. Providing adequate training and professional development to teachers can be a significant challenge.
- **Affordability and Access:** The cost of implementing AI and robotics in education can be a concern, as not all schools and institutions may have the financial resources to invest in such technology.

Overall, the uniqueness of "Artificial Intelligence & Robotics" in the Indian education system lies in its potential to address specific challenges and leverage technology to enhance the learning experience and skill development of students across the country. By navigating the challenges effectively, India can position itself as a leader in utilizing AI and robotics in education.





## EVIDENCE OF SUCCESS

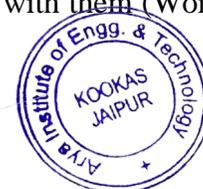
After learning various technologies related to Robotics, AI&ML, the students of ECE, CSE & IT, ME & EE has made many Industrial and commercial Robots.

To utilize the Technical, Startup and Innovation skills of the student's college has started one startup named "Irobolabs" [www.irobolabs.com](http://www.irobolabs.com) with the students and has commercially launched various Robots in the market which are installed in various Govt. and Non-Govt. organization pan India.

Here are some examples which are the witness of the students' success in the **field of Artificial Intelligence and Robotics.**

- **Ruby Robot-** Humanoid Robot incorporated with Artificial Intelligence, Machine Learning, Sensors Programming, Magnetic or LIDAR Programming, Command based which is used in Hotels, Restaurant for serving purpose and in Schools and Colleges as a Receptionist Robot. This Robot is installed in various Restaurants as well as in Schools, Colleges in Mumbai, Kerala, Haryana, Delhi and Rajasthan.
- **Robocop Robot:** Humanoid Robot incorporated with Face recognition, Voice recognition, This Robot is installed in Cyber Crime Office, Delhi Police, New Delhi.
- **Voice Command, LIDAR** based Robots of different size and shapes are under development phase to be used in for the learning different engineering colleges & Universities.
- **UV Disinfected Robot-** during the COVID-19 we have developed a robot which can sterilize the surface and disinfect the surroundings
- **Bionic Hand:** we made first 3D printed Robotic arm in the state of Rajasthan and with the continuous efforts of over 3 years we develop the Bionic Hand named as Jaipur Hand which is as good as natural hand, the beauty of Bionic Hand is that in Stanford or Harvard University the costing \$100,000 but the cost of our Bionic Hand is only Rs. 50000.

We had a MOU with **Bhagwan Mahaveer Viklang Sahayata Samiti (BMVSS)** for transfer of technology to **BMVSS** and we entered into **Technical Collaboration** with them (World famous Jaipur Foot)





# ARYA Institute of Engg. & Technology (AIET)

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We also have setup Robotics lab in various schools, Colleges and Universities in India.

- Won Best Startup Award by MSME Department, Govt. of Rajasthan & Laghu Udyog Bharti. Awarded by Ex-CM Smt. Vasundhara Raje.
- 2nd Winner of Innovative & Startup Competition by Rajasthan Technical University, RTU Kota.
- We have been awarded Incubation and Innovation Centre by RTU, Kota.
- We also have the MSME (HI/BI Centre) incubation Centre.
- **We have been awarded Center of Excellence in Artificial Intelligence Robotics by RTU (Rajasthan Technical University), Kota.**





## PROBLEMS ENCOUNTERED

Addressing these problems requires a collaborative effort from governments, academia, industries, and society at large. Ongoing research, robust regulations, ethical guidelines, and a commitment to responsible innovation are crucial to ensuring that AI and robotics bring about positive advancements while mitigating potential risks.

- Procuring the material and other electronics components especially DC motors during Robots manufacturing.
- Products customizations.
- Problem faced in Animatronics during robot manufacturing.




## RESOURCES REQUIRED

- Plastic Molding technique needs to be implementing to improve the body parts of the products.
- Increase the participation in various Innovative Idea competitions.
- Regular updation and learning of latest Technologies in the field of Machine Learning, Artificial Intelligence and Robotics.
- Plastic Molding technique needs to be implemented to improve the body parts of the products.




## NOTES

**Arya Institute of Engineering and Technology – AIET** has established state of the Art Artificial Intelligence and Robotic Lab for student leaning and R&D and manufacturing purpose in the field of Artificial Intelligence, Robotics, Automation, Machine Learning, Drone, Mechatronics, Laser Cutting, Vacuum Forming, 3D Printing etc. AIET have the capabilities of designing to manufacturing of many kinds of commercial and industrial Robots by incorporating Artificial Intelligence, Machine learning into them.

AIET has been working for last 6 Years in the field of Robotics and Artificial Intelligence and has developed more than **10 kinds of Robots** which are working in many Technical Spheres like Artificial Intelligence, Voice Command Control, Voice Recognition, Face Recognition, 24 Hours Surveillance and doing the task as per the voice command.

For the same we have been awarded **Center of Excellence in Artificial Intelligence Robotics by RTU (Rajasthan Technical University), Kota.**

### Centre of Excellence in Artificial Intelligence and Robotics

#### **Introduction:**

The Centre of Excellence (CoE) in Artificial Intelligence (AI) and Robotics is a dedicated institution focused on advancing research, development, and applications in the fields of AI and robotics. It serves as a hub for interdisciplinary collaboration, innovation, and knowledge exchange.

#### **Objectives:**

The CoE in AI and Robotics is established with the following key objectives:

- **Research Advancement:** Conduct cutting-edge research in AI and robotics, exploring new algorithms, technologies, and methodologies to advance the field.
- **Skill Development:** Foster talent in AI and robotics by providing training programs, workshops, and courses to students, researchers, and industry professionals.
- **Industry Collaboration:** Forge strong partnerships with industries to drive the adoption of AI and robotics in various sectors and address real-world challenges.





- Innovation and Entrepreneurship: Promote innovation and entrepreneurship in AI and robotics by supporting startups, incubating ideas, and facilitating technology transfer.

## Research Initiatives:

The CoE in AI and Robotics undertakes several research initiatives to advance the state of the art in these domains. Some of the key areas of research include:

- Machine Learning and Deep Learning: Develop novel algorithms and techniques to enhance machine learning and deep learning models, enabling them to process complex data and make intelligent decisions.
- Computer Vision: Investigate computer vision algorithms for image and video analysis, object recognition, scene understanding, and visual perception in robotics applications.
- Natural Language Processing (NLP): Explore NLP techniques for language understanding, sentiment analysis, machine translation, speech recognition, and dialogue systems.
- Robotics and Automation: Conduct research in robotics and automation, including robot perception, motion planning, control systems, human-robot interaction, and autonomous navigation.
- Ethical and Responsible AI: Investigate ethical considerations and frameworks for the development and deployment of AI and robotics, ensuring fairness, transparency, and accountability.

## Training and Skill Development:

The CoE in AI and Robotics plays a crucial role in nurturing talent and building a skilled workforce in these emerging fields. It offers a range of training programs, workshops, and courses to various stakeholders:

- Students: Conduct specialized courses and workshops for undergraduate and postgraduate students, providing them with a strong foundation in AI and robotics.
- Researchers: Organize research seminars, conferences, and collaborative projects to facilitate knowledge exchange among researchers and promote interdisciplinary research.





- **Industry Professionals:** Provide industry-focused training programs to upskill professionals, enabling them to leverage AI and robotics technologies in their respective domains.

## Industry Collaboration:

The CoE in AI and Robotics collaborates with industries to address industry-specific challenges and foster innovation. Key aspects of industry collaboration include:

- **Joint Research Projects:** Undertake collaborative research projects with industry partners, combining academic expertise with industry insights to develop innovative solutions.
- **Technology Transfer:** Facilitate the transfer of cutting-edge AI and robotics technologies from the CoE to industries, promoting the adoption of advanced techniques in real-world applications.
- **Consultancy Services:** Provide consultancy services to industries, offering expert advice on implementing AI and robotics solutions, optimizing processes, and improving productivity.
- **Startups and Incubation:** Support startups and entrepreneurs in the AI and robotics domains, offering mentorship, infrastructure, and networking opportunities to nurture innovation and entrepreneurship.

## Innovation and Impact:

The CoE in AI and Robotics aims to drive innovation and make a significant impact in various sectors. Some of the notable achievements and impacts include:

- **Healthcare:** Developing AI-powered diagnostic tools, predictive models, and robotic assistance systems to improve patient care, disease detection, and treatment outcomes.
- **Manufacturing:** Implementing AI and robotics technologies for automation, quality control, predictive maintenance, and optimization of manufacturing processes, leading to increased efficiency and productivity.
- **Transportation and Logistics:** Enabling autonomous vehicles, drones, and smart logistics systems powered by AI and robotics, enhancing safety, efficiency, and sustainability in transportation and logistics operations.





- Agriculture: Applying AI and robotics for precision farming, crop monitoring, yield prediction, and automated harvesting, promoting sustainable agricultural practices and increasing crop yields.

## Policy and Ethical Considerations:

The CoE in AI and Robotics actively contributes to the formulation of policies and ethical guidelines concerning the use of AI and robotics technologies. It collaborates with regulatory bodies, policymakers, and ethics committees to address concerns related to privacy, bias, transparency, accountability, and the responsible deployment of AI and robotics systems.

## Conclusion:

The Centre of Excellence in Artificial Intelligence and Robotics serves as a hub for research, training, industry collaboration, innovation, and policy development in the fields of AI and robotics. Through its diverse activities and initiatives, the CoE aims to advance knowledge, foster talent, drive innovation, and ensure the responsible and beneficial use of AI and robotics technologies across various sectors, contributing to societal development and economic growth.





## **List of Proposed Training Programs for Proposed Centre of Excellence**

S. No.	Name of Training Program	Types	Durations
1	PCB Basics	Basic Training for Familiarization of Technology	7 Days
2	CNC Router Technology	Basic Training for Familiarization of Technology	7 Days
3	Arduino Programming	Basic Training for Familiarization of Technology	7 Days
4	Raspberry Pi	Basic Training for Familiarization of Technology	15 Days
5	CNC Router	Basic Training for Familiarization of Technology	15 Days
6	Embedded System Programming	Certificate Training Program	30 Days
7	Auto CAD Eagle	Certificate Training Program	30 Days
8	SMT Technology	RTU Internship	45 Days
9	PCB Manufacturing	RTU Internship	45 Days
10	Python Programming	RTU Internship	45 Days





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India  
ARYA College of Engineering, Jaipur





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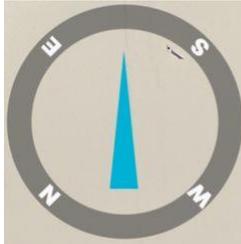




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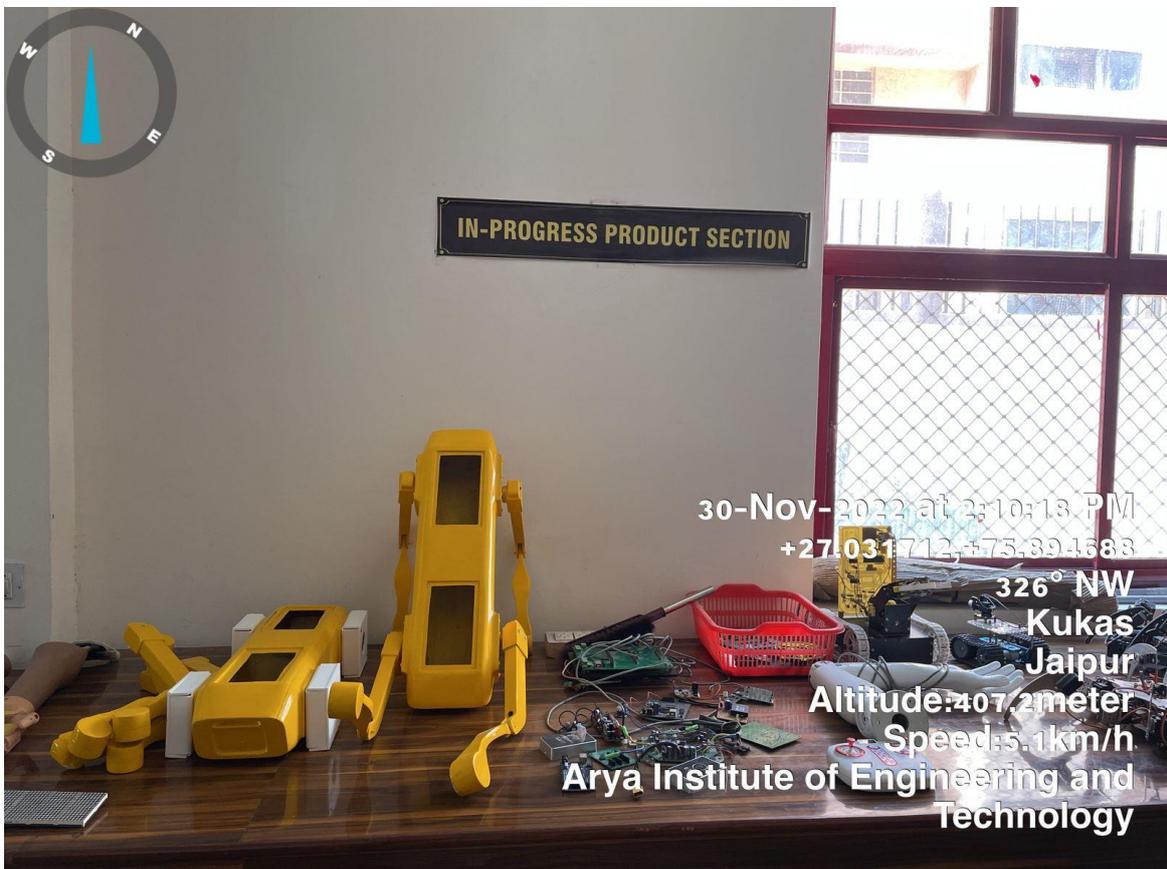
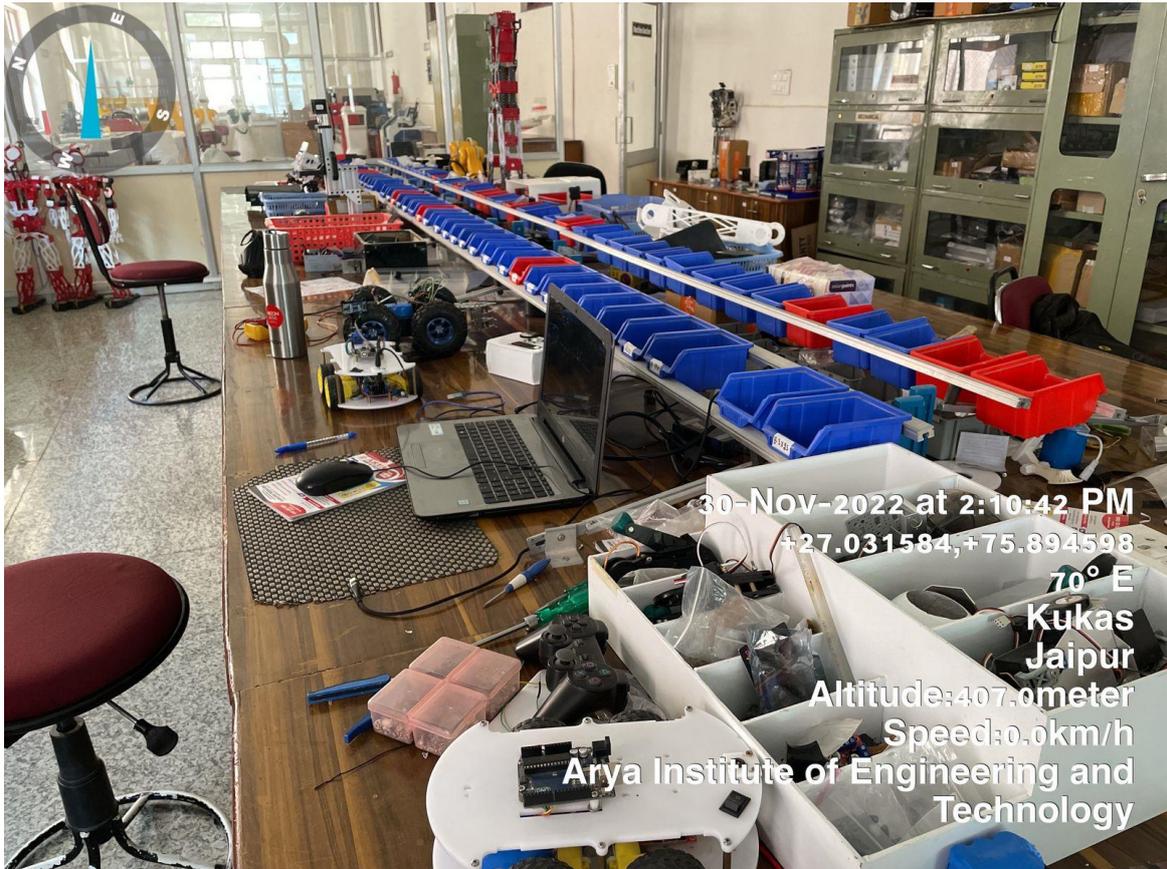




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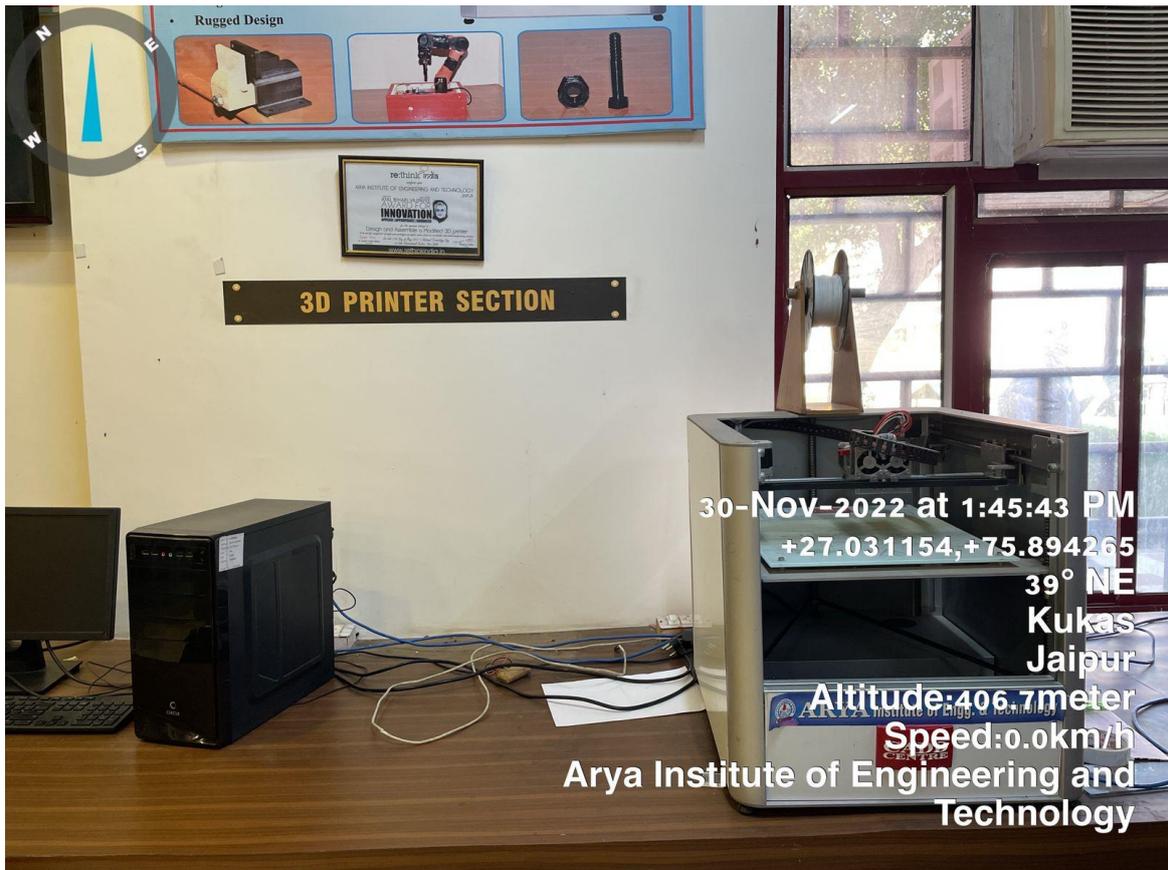
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Jaipur

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Kukas

Jaipur

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# CERTIFICATE

OF EXCELLENCE

THIS CERTIFICATE IS PRESENTED TO

*Chirag Goel*

***Dekho Infotech Private Limited, Jaipur***

For winning the State Level, 3rd prize in the  
**Rural Innovation Challenge, 2022**  
**Rajasthan**

  
\_\_\_\_\_  
**TAPAN KUMAR**  
SA ( Joint Director)



**20th August 2022**



Department of Information  
Technology & Communication



सत्यमेव जयते  
GOVERNMENT OF RAJASTHAN



# CERTIFICATE

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*Chanchal Rathore*

**Dekho Infotech Private Limited, Jaipur**

For winning the State Level, 3rd prize in the  
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**Rajasthan**

  
TAPAN KUMAR

SA (Joint Director)



20th August 2022

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*Ankita Jain Mehta*

**Dekho Infotech Private Limited, Jaipur**

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**Rajasthan**



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**TAPAN KUMAR**  
SA ( Joint Director)



20th August 2022

# CERTIFICATE OF EXCELLENCE

**THIS CERTIFICATE IS PRESENTED TO**

*Dr. Ajay Saini*

***Dekho Infotech Private Limited, Jaipur***

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**Rajasthan**

  
**TAPAN KUMAR**  
SA ( Joint Director)



**20th August 2022**

# CERTIFICATE OF EXCELLENCE

**THIS CERTIFICATE IS PRESENTED TO**

*Dr. Pooja Agarwal*

**Dekho Infotech Private Limited, Jaipur**

For winning the State Level, 3rd prize in the  
**Rural Innovation Challenge, 2022**  
**Rajasthan**

  
**TAPAN KUMAR**  
SA ( Joint Director)



**20th August 2022**



Department of Information  
Technology & Communication



सत्यमेव जयते

GOVERNMENT OF RAJASTHAN



# CERTIFICATE

OF EXCELLENCE

THIS CERTIFICATE IS PRESENTED TO

*Arvind Agarwal*

**Dekho Infotech Private Limited, Jaipur**

For winning the State Level, 3rd prize in the  
**Rural Innovation Challenge, 2022**  
**Rajasthan**

  
**TAPAN KUMAR**

SA ( Joint Director)



20th August 2022



## Following are the evidence of success of AIET in the field of Artificial Intelligence & Robotics:

- AIET has been awarded Center of Excellence in Artificial Intelligence & Robotics (AIR) by RTU (Rajasthan Technical University), Kota.
- Winner of Innovative & Startup Competition by Rajasthan Technical University, RTU Kota.
- Won Best Startup Award by MSME Department, Govt. of Rajasthan & Laghu Udhog Bharti.
- 2nd Winner of Innovative & Startup Competition by Rajasthan Technical University, RTU Kota.
- Successfully organized online virtual fair of Toycathon – Toy fair of Govt. of India.
- Successfully organized online book fair of NBT (National Book Trust) Govt. of India.
- Winner of INFOSYS- Techzooka-2019 held at Infosys Limited, Jaipur Development Centre.
- One of our Student Project Aloe Cell won the Global Innovation Summit “Go Green” in Barcelona.
- One of our projects named “Digital Stethoscope” by DST, Govt of Rajasthan for funding support in IDEATHON.
- AIET (MSME HI/BI Incubation Centre) has also Participated in National Level Ideas Competition named “Ideas for New India 2020” organized by MSME Department, Govt. of India, New Delhi.
- AIET has participated in International Investment Challenge “National Level Innovative Ideas Competition” organized by Inventivepreneur Foundation, New Delhi in which Selected 9 Innovative Ideas of our college were selected for National Pitch Day.
- AIET college startups (Dekho Network Pvt. Ltd., Dekho InfoTech Pvt. Ltd.) has also submitted 3 innovative projects named Portable Ventilator System, DTM Machine, Nancy Robot, in the CAWACH (Centre for Augmenting WAR with COVID-19 Health Crisis).
- www.irobolabs.com (<http://www.irobolabs.com>)





- Dekho Network Private Limited –is the software company and doing many National, International, Govt. and Non. - Govt. Projects. And registered in Startup India, Gems, and Udyam. [www.dekho.co](http://www.dekho.co) (<http://www.dekho.co>)
- Dekho InfoTech Private Limited- is the (Brand Name- I-Robolabs) Robotics Company Registered in Start-up India, Gems, and Udyam and has launched many commercials and Non-Commercial Robots in market.
- Successfully installed various Robots in Restaurant, Hotels and Installed Robotics Labs in various Schools, Colleges and Universities all over India.
- AIET has submitted 9 Projects proposal in DST, Govt. of Rajasthan in FITR (Festival of Innovation & Technologies of Rajasthan).



**Winner & 2<sup>nd</sup> Winner of Innovative & Startup Competition by Rajasthan Technical University, RTU Kota  
In Medical Innovation and Robotics**



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## Winner of Global Hackathon Jointly Organized by Rajasthan Technical University and SIT College.



## 2<sup>nd</sup> Winner of Softech Hack-2021 Hackathon Jointly Organized by Rajasthan Technical University and Anand College



International Investment Challenge "National Level Innovative Ideas Competition" organized by Inventivepreneur Foundation, New Delhi in which **Selected 9 Innovative Ideas of our college were selected for National Pitch day.**



**Aloe Cell won the Global Innovation Summit "Go Green" in Barcelona.**



## Industrial Visits

### USA Visit (Funded by DOIT under Rajasthan Startup Exposure Program)



## DETAILS OF PRODUCTS MADE

### Commercials Robots

S. No.	Name of Robot	Photos	Functionality
1	Ruby Robots (Food Delivery)		This Robot is used in Restaurant, Hotels to deliver the foods from Kitchen to Tables.
2	Nancy Robot (Delivery Robot)		Can be used in Hospitals to deliver day to day equipment's, medicines from store to patient room. Also Keep the patient records.
3	Robocop		It also has the ability to do eye level surveillance, face and gesture recognition, detect metals, monitor temperature. <b>RoboCop</b> is specifically equipped to protect and secure malls, airports, offices, buildings and other public and private places.
4	UV sterilization and disinfectant institutional robot		This is the disinfection UB light / Spray robot which can drying and spray multiple disinfection liquids, and diffuse the disinfection spray to target area This disinfection way, we can separate human and machine to avoid contact each other and lower the infection risk. Can be Hospitals, Mall, Hotels, Restaurants, School and Colleges.

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5	Iglu Robot		<p>This Robot Can be used for:</p> <ol style="list-style-type: none"> <li>Robo Guide at Airport, Malls, Hospital etc.</li> <li>Work for Teaching purpose in School/College</li> <li>Product interpretation and Answering inquiries</li> </ol>
6	Selfie Robot		<p>This robot can be used in the Parties to take the selfie and send to the mobile automatically.</p>
7	Delivery Bot (Autonomous)		<p>This Robot is the Autonomous and Auto navigation, Self Learning and Smart Robot and can be used in Restaurant, Hotels, Offices, and Industries to deliver the items.</p>

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## AI & Robotics Lab Products (For Schools, Colleges and Universities)

S. No.	Name of Product	Photos	Student Learning
1	Industrial Robotic Arm (Big Size)		Advanced Mechatronics, PCB learning and Servo & Stepper motors Control Programming
2	Robotic Arm Pick and Placed		Vacuum Based Gripper Programmable
3	Sophia-Robot (Query - Answered) with AI		Mechatronics, Python based Raspberry Programming and 3D Printing and Servo motors Control Programming. Understanding of AI based Voice Recognition Programming
4	Robotic Palm		Mechatronics, PCB learning and Servo motors & push button Control Programming
5	Spider Serving Robot		Mechatronics, PCB learning and Servo motors & Ultrasonic Sensor Control Programming Robot

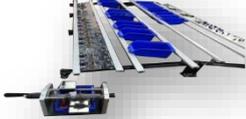


6	AI Based Robotic Face With Alexa		Advanced Mechatronics, Python based Raspberry Programming and 3D Printing and Servo motors Control Programming. Understanding of AI based Voice Recognition Programming.
7	Hexapode with video transfer Reality		Advanced Learning of Mechatronics, PCB. And Servo motors & Ultrasonic Sensor Control and augmented reality Programming.
8	Spider Robot with Multiple Movement		Mechatronics, PCB learning and Servo motors & Ultrasonic Sensor Control Programming.
9	Robotic Arm with Gesture Control		Mechatronics, PCB learning and Servo motor Control Programming and Gesture control programming.
10	Humanoid -Cut Sheet- 12"(Dancing/Programming)		Mechatronics, PCB Making and Servo motor Controlling.
11	Super Anthony Robot		Mechatronics, PCB Making and Servo motor Controlling and Sensor programming



12	Walk With Me Robot		Mechatronics, PCB Making and Servo motor Controlling and Voice Control Programming.
13	BIPED Robot		For Program Learning
14	Line Follower Robot		Line Following Programming for Different Patterns
15	Android APP Controlled Robot		App controlled programming
16	Arduino Kit		Arduino Kit learning for Different-2 Sensors for Input / Output Process
17	Robotic Car Big Size with Different-2 Sensors		Different -2 Sensors Programming and Controlling

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18	Bionic Robot Dog for Raspberry Pi 4b		Different -2 Motors and sensor controlling with Pi 4b
19	Assembly Line for PCB		PCB Making and Component Mounting.
20	Acrylic Bending Machine		Learning of Bending of Acrylic sheet
21	CNC Router		Learning of PCB cutting and through hole components mounting




## Medical Engineering Products:

S. No.	Name of Product	Photos	Instant Diagnostic Tests
1	DTM Medical Health Kiosk		<p><b>10 Physical Tests:</b> (Blood Pressure, Pulse Oximetry, Temperature, Height, Fetal Doppler, BMI, Body Weight, Body Fat Percentage, Heart Rate, 12 lead ECG).</p> <p><b>4 Biochemistry &amp; Hematology Tests:</b> (Hemoglobin, Blood Sugar, Uric Acid, Total Cholesterol)</p> <p><b>8 PFT through Spirometer (Lung Function) Tests:</b> FVC, FEV1, FEV1/FVC, PEF, PEFR, FEF25-75%, MEF75%, MEF50%</p> <p><b>10 Infectious Disease markers:</b> Malaria, Dengue, Typhoid, Hepatitis B, Hepatitis C, Syphilis, HIV, HCG, COVID19, Chikungunya).</p> <p><b>3 Cardiac &amp; Inflammatory Markers:</b> Troponin I, D-Dimer, Vitamin-D</p> <p><b>11 Urine Parameters:</b> LEU, NIT, UBG, PRO, PH, SG, BLD, KET, BIL, GLU, VC</p>
2	Portable Medical Lab-PML		<p><b>10 Physical Tests:</b> (Blood Pressure, Pulse Oximetry, Temperature, Height, Fetal Doppler, BMI, Body Weight, Body Fat Percentage, Heart Rate, 12 lead ECG).</p> <p><b>4 Biochemistry &amp; Hematology Tests:</b> (Hemoglobin, Blood Sugar, Uric Acid, Total Cholesterol)</p> <p><b>8 PFT through Spirometer (Lung Function) Tests:</b> FVC, FEV1, FEV1/FVC, PEF, PEFR, FEF25-75%, MEF75%, MEF50%</p> <p><b>10 Infectious Disease markers:</b> Malaria, Dengue, Typhoid, Hepatitis B, Hepatitis C, Syphilis, HIV, HCG, COVID19, Chikungunya).</p> <p><b>3 Cardiac &amp; Inflammatory Markers:</b> Troponin I, D-Dimer, Vitamin-D</p> <p><b>11 Urine Parameters:</b> LEU, NIT, UBG, PRO, PH, SG, BLD, KET, BIL, GLU, VC</p>





# ARYA Institute of Engg. & Technology

(Affiliated to RTU • Approved by AICTE, New Delhi)

• S.P.- 40, Kukas Industrial Area (RIICO) Jaipur - 302028 • Website : www.aryacollege.org

• Ph.: 0141-2820700, 5148801

• Toll Free No. : 1800-102-1044

Submitted 3 innovative projects named Portable Ventilator System, DTM Machine, Nancy Robot, in the **CAWACH (Centre for Augmenting WAR with COVID-19 Health Crisis.)**



Participated in National Level Ideas Competition named **“Ideas for New India 2020”** organized by **MSME Department , Govt. of India , New Delhi.**

10 submissions found. [Expand all](#)

Name	Date of Birth	Sector	Current Status	Step	Date
1. Mr. Ajay Sam	11/05/1982	Robotics	Start Up	1	20/02/2020
2. Mr. RAJESH KUMAR	28/10/1982	Technology Hardware	Start Up	1	20/02/2020
3. Ms. Shrutika Palwal	31/07/1993	Agriculture	Start Up	1	20/02/2020
4. Mr. Sandeep Kumar Shank	03/10/1974	Agriculture	Start Up	1	20/02/2020
5. Ms. Nimata Vanta	23/04/1997	Renewable Energy	Start Up	1	20/02/2020
6. Mr. Dr Himanshu Arora	17/02/1981	Robotics	Start Up	1	20/02/2020
7. Mr. Prasad Kumar Sharma	18/07/1985	Healthcare & Lifesciences	Start Up	1	20/02/2020
8. Mrs. Pooja Agarwal	08/08/1975	Robotics	Start Up	1	20/02/2020
9. Mr. Yogesh Sharma	01/02/1976	Technology Hardware	Start Up	1	20/02/2020
10. Mr. Jyoti Inbar	13/08/1980	Healthcare & Lifesciences	Existing Entrepreneur	1	19/02/2020

