

AcenAAr Technologies Pvt. Ltd.

**AcenAAr Technologie's Official
AI , ML and AIOT Trainer Kit
Guide-2023.**



The present era is stirring towards INDUSTRY 4.0 which paved new opportunities for technocrats. AI and ML technology has made mandate for very huge skilful manpower in present scenario. Seeing the dire need of technology many educational institutions in India and abroad are introducing AI and ML technology courses both in theory and practice. also, with kits we are presenting programming procedure for resource unequivocally designed AI and ML kit. special care is taken to keep instruction simple and clear and yet cover utilization of all resources available in the kit. At the end of the laboratory, students will acquaint with kit and have confidence to develop the AI and ML programs and applications

Call for Quotation



7032131793 , 7989942182

info@acenaartechnologies.com

Acenaar Technologies Pvt. Ltd.76/2-SKV-4F-1,
4th Floor, Skandanshi vyapar, Opposite old edigah, Kurnool,
A.P., INDIA. -518301

MODEL-A EDGE AIOT KIT

Controll Unit	Sensor Unit
<ol style="list-style-type: none">1. Machine Vision cam Module.2. Arduino nano with extended connectors.	<ol style="list-style-type: none">3. Ultrasonic sensor4. PIR sensor5. DHT sensor6. IR sensor7. LDR sensor8. Key board9. MQ 135 sensor10. TDS sensor11. Joystick12. colour sensor
Actuator Unit	Display Unit
<ol style="list-style-type: none">13. Servo motor14. Realy15. Buzzer	<ol style="list-style-type: none">16. LCD Dispaly17. Seven Segment18. Logic LED's19. RGB LED
Connectivity unit	Miscellaneous
<ol style="list-style-type: none">20. ESP8266 Wi-Fi module21. Bluetooth module	<ol style="list-style-type: none">22. 400 points solderless breadboard



Highlights of the kit

1. Customized Edge AIOT trainer KIT
2. 200+ experiments
3. Well developed Manuals
4. Ease of operations
5. Mini & Major Projects

AI and ML WORKSTATION

Controll Unit	Sensor Unit
<ol style="list-style-type: none">1. Machine Vision cam Module.2. Arduino nano 33 BLE Sence.3. Raspberry pi-400 single board computer.4. ESP 32 Board	<ol style="list-style-type: none">5. IMU sensor6. Microphone7. Gresture, light, proximity8. Barometric Pressure sensor9. Temperature and humidity Sensor10. TDS sensor11. MQ 135 sensor12. joystick
Actuator Unit	Display Unit
<ol style="list-style-type: none">13. Stepper motor	<ol style="list-style-type: none">14. 1.8" TFT display
Connectivity unit	Miscellaneous
<ol style="list-style-type: none">15. Bluetooth module in BLE sence16. HC-05 module	<ol style="list-style-type: none">17. 400 points solderless breadboard18. Monitor



Highlights of the kit

1. Comes with Rpi 400 single board computer and Monitor
2. 200+ experiments
3. Comes with four controllers
4. Ease of operations
5. Mini & Major Projects

list of Laboratories

S.no	Name of the LAb	Description
Lab -1	Python Level-1	Introduction to implementation of basic algorithms for AI and ML.
lab - 2	Python Level-2	Introduction to real time data acquisition using sensors sor AI & ML
Lab -3	Data Science Lab	Introduction to implementation of data science algorithms for Ai & ML
lab -4	AI & ML Level -1	Apply Ai & ML concepts on real time applications.
Lab-5	AI & ML Level -2	Implementation of Ai & ML con-cepts on real time application.
Lab-6	AI & ML Level -3	Implementation of Ai & ML adva-nced concepts on real time application.
Lab-7	Edge AI & ML - L1	Quick start Edge AI & ML Machine vision application.
Lab-8	Edge AI & ML - L2	Quick start AI & ML in open MV application with Ultra low power microcontrollers.
Lab-9	AIOT projects	Devolop AI & ML AIOT projects
Lab-10	NLP LAB	NLP programming

Technoical specification for Software and hardware AI & ML

Languages	Python	C++	
Ultra-low power Micro controller & MC	ARM-32 bit, CORTEX-4 CPU OV2640,OV5640	ARM-64 QUAD, CORE CORTEX A72, 4GB RAM	KENDRYTE K210
Tools	Open CV TINY ML Tableau	Open CV Keras seikit-learn	Tensor Flow Tensor Flow - lite
SCM & ML	Git Hub	Up-Works	