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#### Intel loT Club AMRITA VISHWA VIDYAPEETHAM, COIMBATORE





#### lst batch **Openvino Training** Session 7 FEB 2022

Intel IoT Club's first industrial training session on Intel DevCloud and Intel OpenVINO toolkit. Sandeep Rajakrishnan (ML Lead) addressing the development and deployment of deep learning models.

**Deepak Sai (Head)** demonstrating a "Safety Detection" project, benefits highlighting the of OpenVINO to optimize AI models and test their performance on Intel DevCloud.



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Sandeep Rajakrishnan Speakers: Pendyala Deepak Sai

TOPICS

AI ML IOT DEEPLEARNING

#### **Blog-a-thon** 23 June 2022

A technical blog competition on AI, ML, Deep Learning, and IoT with entries exceeding 800 words.

Out of 30 contenders, 5 emerged victorious providing an excellent platform for the students to showcase their writing and technical knowledge in AI and IoT.

AMRITA Intel IoT Club **TECHNICAL BLOG-A-THON** 

23 JUN 2022

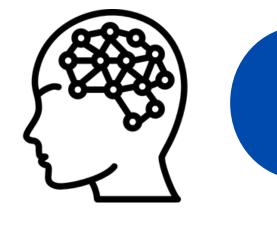
ONLINE



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#### Breaking into AI 21 MAY 2022

The Intel IoT Cub conducted its **first offline event**, Pie & AI - Amrita: Breaking into AI with over **500 registrations and 300 attendees**.

**Deepak (Head)** emphasized the importance of club participation.

**Prem Sundar (AI Lead)** introduced AI and machine learning concepts.

**Mohan (IoT Lead)** discussed about IoT and its various use cases in smart cities and homes.

**Dr. Anbazhagan (Faculty Coordinator)** concluded by outlining upcoming events.

#### Breaking into AIoT 15 NOV 2022

The **seminar** focused on IoT, AR, and Machine Learning, and relevant Intel technologies, drawing a massive response with **600 registrations and over 400 attendees.** 

Mr. Navaneeth Malingan (Founder of Nunnari Labs, Coimbatore) shared insights on Opensource, Competitive Programming, and Entrepreneurship.







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**INTEL IOT CLUB** Amrita Vishwa Vidyapeetham, Coimbatore

Hardware-on-Top(HAT)s of Raspberry Pi



A **webinar** on Edge AI and HATs of Raspberry Pi explored the basics of Raspberry Pi and its HATs (Hardware Attached on Top)

**Mohan V (IoT Team Lead)** covering different Raspberry Pi HATs.

DeepakSai(Head)discussedapplicationsofEdgeAIwerediscussed,emphasizingthebenefitsofIntel oneAPIfordeployingcross-architectureapplications.

#### IoT workshop - "Build your smart home" 23 APR 2023

An **IoT workshop** was conducted on building our own smart homes using Raspberry pi 3 and grove pi kit. **Mohan V (IoT Team Lead) and Yash Puthalath (IoT Team Member)** presented the working of **raspberry pi 3 and grove pi kit**.

A total of **7 smart home devices** were built and the different use cases of the sensors were discussed in the workshop with **50 attendees**.







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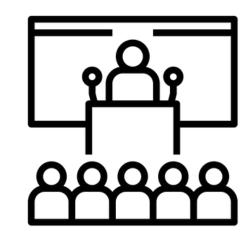
#### IoT Competition 19 AUG 2023

An **IoT competition** conducted by **Mohan V(IoT Team Lead)** with a problem statement of creating an application with **grove pi kit** was held. Out of **20 applications**, the outstanding applications were **coal mine evacuation system**, **environment sense system, smart agriculture monitoring system**.

The participants of the previous workshop applied their newly acquired knowledge in this

#### **2nd batch**

#### Intel IoT Club Induction 2 FEB 2024



competition.

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The Intel IoT club conducted its **second induction event** for the new academic year with **second batch** - **new 40 members** of the club.

**Srinithi (IoT Lead) and Balasuriya** (AI/ML Lead) presented the gathering about the emerging trends of IoT and AI.

Live demo of **Entry count system** was deployed in the hall which impressed the **200 attendees**.





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#### PiCraft: Build a Game Server with Raspberry PI 28 FEB 2024

An **IoT workshop** on building a **game server with Raspberry Pi** was conducted by **Dr. Anantha Narayanan and Mohan V.** 

The **new loT team members** presented the workshop using **Raspberry Pi 3 and grove pi kit**.

With **60 attendees**, the basics of IoT, Raspberry Pi and grove pi kit was taught and a game server was built

using Raspberry Pi.

#### Intel oneAPI Workshop 15 MAR 2024

A Intel oneAPI workshop was conducted with **70 attendees** explored different applications of Intel oneAPI. The **Intel oneAPI student ambassadors Balasuriya and Navabharati** along with **Dilip P(ML Engineer at Sivi)** presented the real-world insights on oneAPI. Participants were able to gain complete understanding about **Intel oneAPI along with Intel DevCloud.** 





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WOKWI SIMULATOR HANDS-ON WEBINAR -----19 MAY, 2024 10 AM-1 PM

ARDUINO

ESP32

PICO

**RASBERRY PI** 

#### Wokwi Simulator: Hands-on Webinar 19 MAY 2024

The Wokwi Simulator Hands-on Webinar had **90 participants** who were introduced about the working of **Arduino, Raspberry Pi Pico and ESP32 simulation** through working on hands-on projects.

Mangal(Co-head) with the new IoT team explored **10 home automation IoT simulations** along with cloud platform integration.



**3rd batch** 

REGISTER NOW

#### IoT simulation Webinar 21 JUL 2024

The IoT simulation webinar was conducted as part of ideation phase in **ESP2LIFE hackathon**. With **120 hackathon and non-hackathon participants**, the webinar reached a wider audience.

Mangal(Head) and Jaidev(IoT Team Lead) along with IoT team members presented IoT project integration with various cloud platforms like Thingspeak, Adafruit, NodeRed,. to create functional IoT simulation





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#### ESP2THINK: ESP32 AIoT Workshop 27 JUL 2024

The AloT workshop with **50 participatns** is a first-of-its-kind event to teach Al and IoT into an application.

Ananth(AloT Team Lead) and AloT team members demonstrated how to set up and use the ESP32 and MPU-6050 Accelerometer sensor with Edge Impulse for data collection, model training, and

deployment in machine learning applications.



#### ESP2AR: ESP32 AR with IoT Workshop 6 AUG 2024

This AR with IoT workshop guided the 50 participants through the process of gathering sensor data from an IoT platform and displaying it in augmented reality with Unity Engine and BLYNK cloud platform. Jaidev(IoT Team lead) and IoT Team members explained controlling devices and monitoring data using AR interfaces and ESP32 controllers

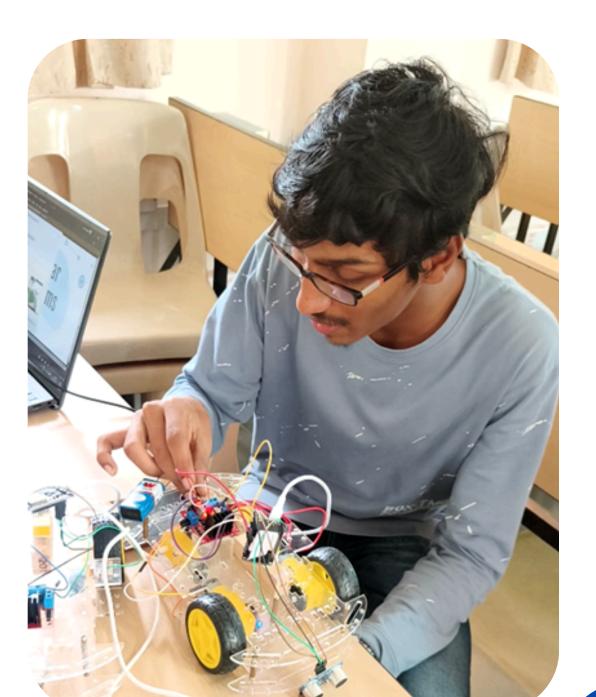




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#### ESP2SYNC: ESP32 Communication workshop 13 AUG 2024

The ESP32 communicaton workshop had **30 participants** who were introduced about the communication between ESP32 controller using **Cloud Platforms Adafruit, ESPNOW protocol, Wi-Fi Communication.** 

**Gurukarthi and Gurukumar(IoT team member )** presented a mini project on controlling speed of two wheeled robots controlled by communication between ESP32 controller.

#### ESP2LIFE Hackathon 15 MAR 2024

ESP2LIFE Hackathon is an **IoT product hackathon** with **50 teams** from various colleges explored different applications of ESP32 boards.

Those **4 workshops** were conducted in ideation phase to make participants learn the various concepts of IoT like Wokwi simulation, AIoT, AR with IoT, Communication protocols.

The **best 2 products** were displayed in **Anokha Tech fair** while all the participants gained an exposure on the applications of IoT and ESP32





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**Edge Fusion Showdown** 

An ESP32 AloT Competition



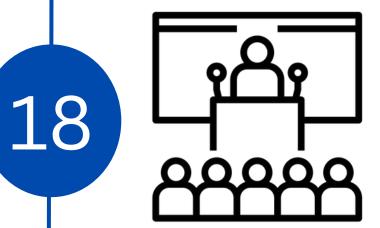
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The **Artificial intelligence of Things** made into reality by deploying 1D and 2D ML models into edge places with ESP32 microcontroller.

With 20 teams in Anokha (National level Techfest) tech competition, application based 1D and 2D models were deployed into ESP32 and ESP32-CAM boards using Edge impulse platform. For Top 2 applications, prize money were awarded.

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#### Intel IoT Club Induction 25 OCT 2024

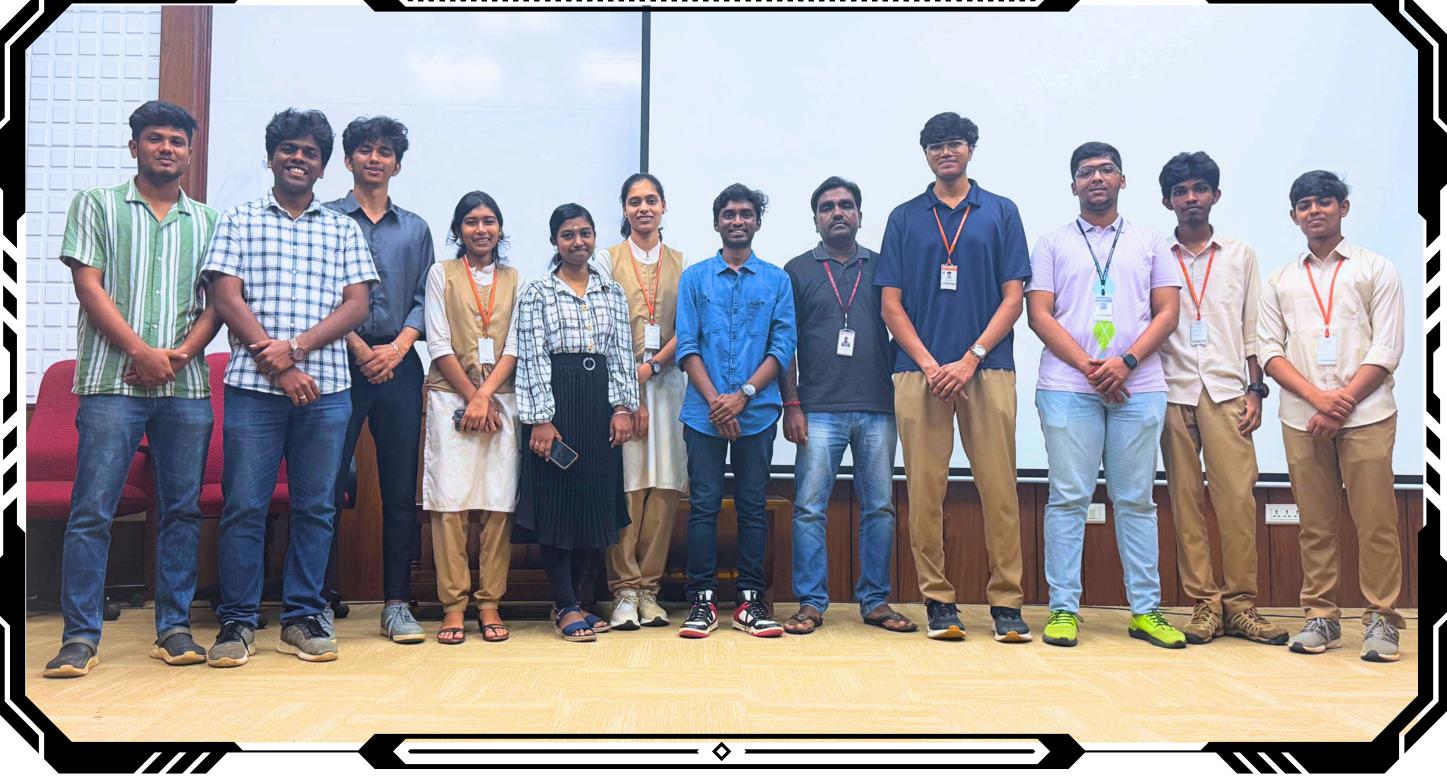
**New Club head Mangal** conducted the **3rd Intel IoT club induction event** for the new academic year **2024-2025** with **3rd batch - new 60 members** of the club.

Jaidev (IoT Lead), Anath (AloT Lead), Thomas (IoRT Lead) presented the gathering about the emerging trends of IoT, AI and Robotics.

Live demo of Face capture based Entry count system was deployed in the hall entry door which impressed the 100 attendees.



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#### Intel IoT Club

Amrita Vishwa Vidyapeetham, Coimbatore, TamilNadu, India

## Faculty Coordinator

Dr. Anbazhagan Mahadevan Dr. Anantha Narayanan Velu

### **Core Team**

Mangalasridhar - Club Head Jaidev - IoT lead Anathasivan - AloT lead Thomas Jefferson - IoRT Lead Shyam Anand - Tech Support Lead Vismaya V- Event Management Lead Mohan V - Co-Founder & Student Mentor Deepak Sai P - Founder & Intel IoT Student Ambassdor

