



An Exclusive
Fortnightly Session on



THE POWER OF ARDUINO

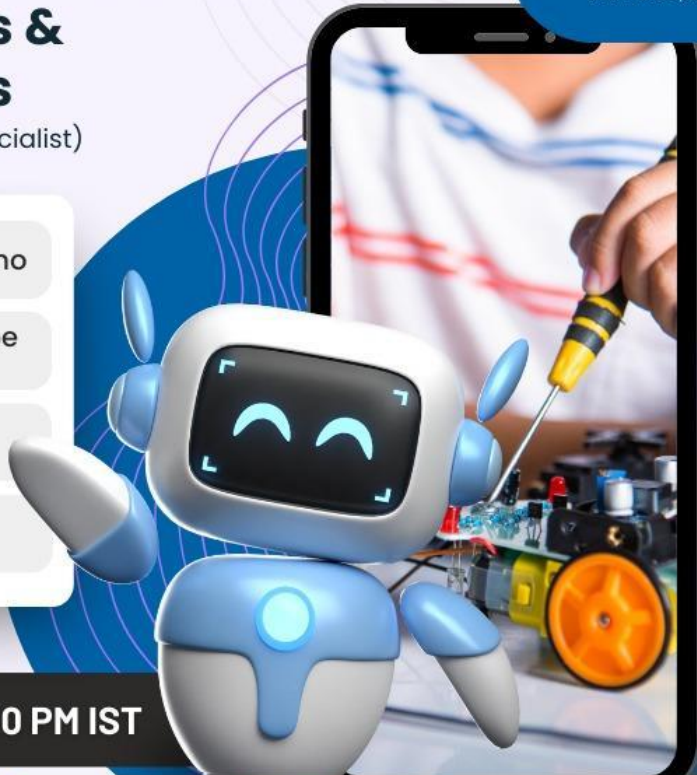
Unlocking Robotics & Career Possibilities

For 9th to 12th
Classes
(Parents/Teachers can
also Participate)

By: **Mr. Adhin V S** (Cyber Security Specialist)

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- ✓ Master Robotics with Arduino
- ✓ Explore the Boundless Scope of Robotics
- ✓ Discover Exciting Career Opportunities
- ✓ Experience Live Demonstration



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NOW**

DECEMBER 19TH, 04:00 PM IST

In Association With



Institute of Artificial Intelligence and Research

आर्टिफिशियल इंटेलिजेंस अनुसंधान संस्थान

KNOWLEDGE AND AWARENESS MAPPING PLATFORM

KNOWLEDGE SESSION 2024: EPISODE 65

Organized By: Knowledge & Awareness Mapping Platform (KAMP)
In Knowledge Alliance with CSIR -NIScPR and M/s NCPL

Topic: The Power of Arduino: Unlocking Robotics and Career Possibilities

Category: Career and Professional Development

Organized for: Students

Speakers/Presenters: Mr. Adhin V S

Date: December 19th, 2024

No. of Participants: 500+ Students from different schools across India

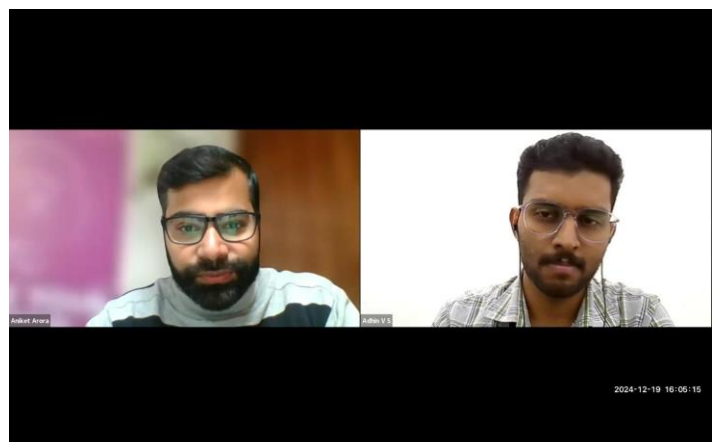
Overview:



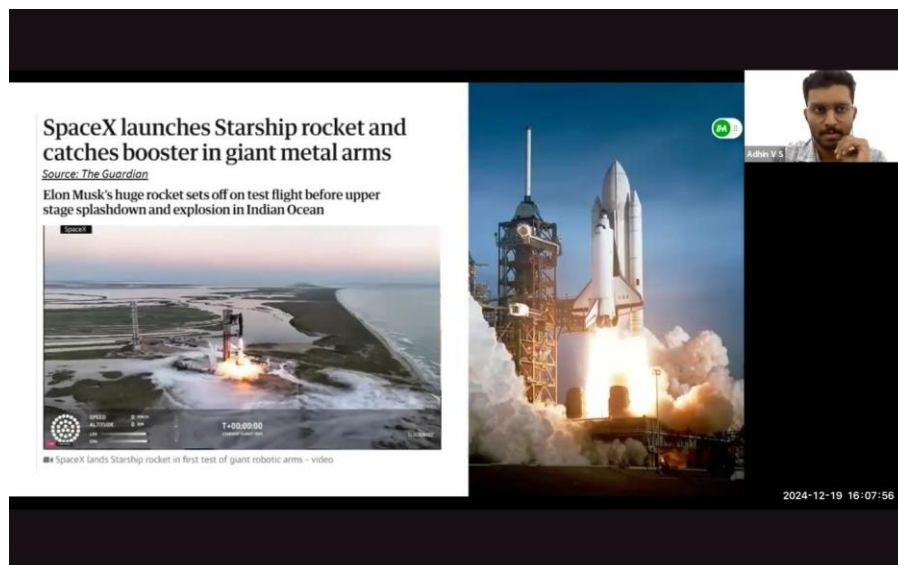
On December 19th, KAMP hosted an intellectually stimulating and dynamic Fortnightly Session titled "The Power of Arduino: Unlocking Robotics and Career Possibilities" for students in grades 9 to 12. This carefully curated workshop was led by Mr. Adhin V S, a highly accomplished Cyber Security Specialist and Knowledge Officer at ICT Academy, Kerala. With a Master's degree in Cyber Security from IITMK and significant industry experience, including his tenure as an

IT Security Auditor at EY GDS, Mr. Adhin brought a unique combination of theoretical knowledge and hands-on expertise to the session. His notable achievements include published research on Acoustic Side Channel Attacks and extensive work in IoT, Embedded Systems, and AI Robotics. Mr. Adhin's unwavering commitment to advancing organizational security and fostering technological innovation positioned him as the ideal mentor for this interactive session.

The workshop began with an introduction to Arduino, a transformative tool in the field of robotics and IoT. Mr. Adhin highlighted Arduino's potential to drive creativity and innovation in technology, explaining its appeal as an open-source platform that simplifies programming and empowers users to build sophisticated projects. Through live demonstrations of Arduino-based projects, such as a functional robotic arm, he illustrated its practical applications in everyday life and industry. The students gained valuable insights into the essential components of Arduino projects, including the SG90 Servo, Potentiometer, and Arduino UNO Board, which demystified the technical aspects and made robotics more accessible.



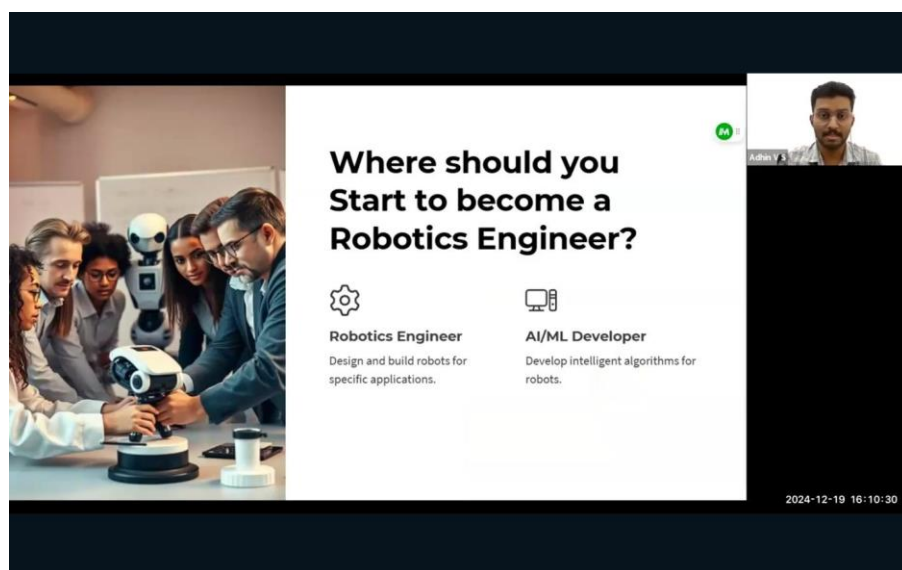
Beyond technical skills, the session explored the broader implications of Arduino in education and career development. Mr. Adhin emphasized its role as a gateway to understanding robotics, IoT, and automation. He discussed the foundational skills required to become a successful robotics engineer, including proficiency in programming languages, familiarity with industry-standard software tools, and a systematic approach to problem-solving. Recognizing the importance of accessible learning, he guided students toward free and affordable resources, including online courses, tutorials on YouTube, and technical documentation.



These insights were designed to encourage students to independently explore the vast world of robotics and technology.

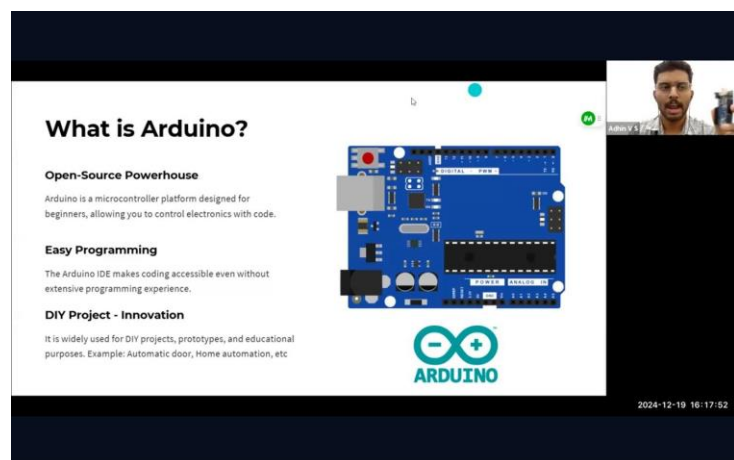
A standout feature of the session was the discussion on career opportunities in robotics, IoT, and cyber security. Mr. Adhin explained how the growing demand for skilled professionals in these fields offers lucrative and fulfilling career options. He underscored the importance of staying curious and innovative, urging students to think critically and apply their knowledge to create impactful solutions. By framing Arduino as a tool that democratizes robotics, he inspired the students to consider its applications in tackling real-world challenges.

The session culminated with an engaging and highly interactive Q&A segment, where students had the opportunity to clarify doubts, seek guidance on project ideas, and learn more about specific career paths. Mr. Adhin's approachable demeanor and personalized advice created a



comfortable environment for students to voice their questions and receive practical solutions. His ability to simplify complex concepts while maintaining depth ensured that every participant left the session with actionable insights and renewed enthusiasm for robotics and technology.

This workshop served as a comprehensive introduction to Arduino and its multifaceted applications, sparking a sense of curiosity and innovation among the participants. It not only enhanced their understanding of Arduino and its components but also opened their eyes to the



immense potential of robotics in shaping the future. The session successfully equipped students with the knowledge and confidence to explore this exciting field further, fostering a generation of tech-savvy innovators ready to make their mark on the world.

KAMP's fortnightly workshops aim to help students develop creativity, meaningful learning, and critical reading and thinking skills, bringing out their inherent abilities.

The vision of KAMP is to identify and capture the Scientific and Technological temperament in students, contributing to making India a Global Leader in the fields of science, technology, and the humanities.

These workshops, conducted by KAMP, cover various topics falling under the categories of science, technology, and innovation, Scientific and Life Skills, Career and Professional Development, Academic development, and training trainers and teachers.

KAMP believes that exposure to such topics from experts within specific fields helps students become aware of real-life situations and challenges, develop a problem-solving nature, understand their core values and personal interests, evaluate their skills within the given area, and achieve their best in their most desirable way.

Organized By:
Knowledge and Awareness Mapping Platform
(KAMP Operations and Coordination Office)

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