≮arkhana°

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SUMMER INNOVATION & INTERNSHIP PROGRAM

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Karkhana Summer Training & Internship Program is the perfect stop for students to prepare for continued learning at any time or to simply dive into a new topic. With live instructions, you'll get to build on-demand tech skills.

Learn essential concepts and skills required in the 21st Century and their momentum before you arrive in the market.

We bring to you, a very focused environment wherein you don't just get to create awesome projects and continue learning but also build up your skills under the guidance of our talented mentors. A platform to keep educators, students and families connected. Learn to assemble, design and code. Discover and Create with Dive into the hottest Ideas. technology. Each session is tailored the to student's interests and skill level! Trainers are kept in the loop with post-session assignments and guizzes.

Program Include:

- Group Classes
- Post session progress reports.
- Karkhana certified instructors
- Latest industry tools and skill

LEARN EXPLORE EXPERIMENT

BENEFITS FROM SIIP

Why sign up for the Karkhana Summer Innovation & Internship Program

- **Creativity Enhancement**: SIIP encourages students to think outside the box, promoting creativity and originality.
- **Exposure to Emerging Technologies**: Students gain exposure to emerging technologies and tools relevant to innovation and product design.
- Get the latest insights via our Guest Lectures from Top Industry and academic experts.
- Implement ideas physically in a safe environment
- Enhance Problem-Solving & Critical Thinking Skills
- Learn and build upon electronics and programming concepts → Attain hands-on Experience
- Certificate of Internship & Training along with many more exciting rewards!

What will you get?

- Interactive Guest Lecture inclusive of a Q&A Session with a leading Industry/Academia Expert
- Educational Sessions on the Curriculum by Karkhana's experts.
- Advanced Learning Sessions on AI, IoT Programming
- Hands-on training through Projects skilfully designed for different classes and groups.
- Hardware & Learning Resources for experimenting will be provided from our side.

CURRICULUM

Week 1: Design Thinking and Physical Computing

- Introduction to Design Thinking Principles
- Importance of Empathy in Product Development
- Ideation Techniques and Team Ideation
- Prototyping and Iterative Design Process
- Introduction to Physical Computing and Basics of Electronics
- Introduction to Microcontrollers
- Choosing and using sensors in projects
- Explanation of motors, servos, and other actuators

Week 2: IoT Fundamentals and Prototyping

- Understanding the concept of IoT
- Visualizing IoT data using charts and graphs
- Introduction to ESP8266 Wi-Fi Module and NodeMCU
- Creating a local web server using NodeMCU
- Understanding IoT security challenges
- Implementing security measures in IoT projects
- Understanding AWS IoT process and architecture
- Preparation for the final security-focused session

CURRICULUM

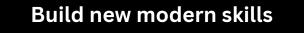
Week 3: Python and AI

- What is Python? Why Python for AI?
- Control flow in Python programs. Defining and calling functions.
- Reading from and writing to files, Understanding OOP concepts: classes and objects.
- What is AI? AI applications and use cases.
- Basics of neural networks. Architecture of neural networks: neurons, layers, and activation functions.
- Understanding supervised learning algorithms: regression and classification.
- Techniques for model evaluation: cross-validation, overfitting, and underfitting.
- What is deep learning? Working with Datasets
- Introduction to sequence-to-sequence models and attention mechanisms.

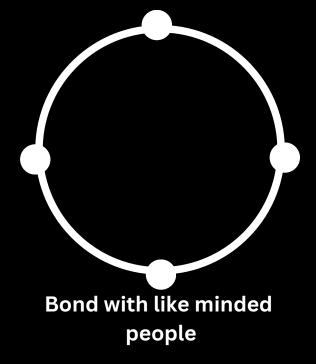
Week 4: Ideas to Reality

• Turn your problem solving idea into reality, using the concept of design thinking, IoT, Python, AI and NLP.

BENEFITS



Get into a structured schedule.



Gain Credentials!!







Focus on

learning

constructive

ELIGIBILITY AND FEE

Minimum Qualifications

- First or second-year or third-year Bachelor's/Master's students majoring in Computer Science / Electronics / Electrical or a related field.
- Basic Programming experience.
- The candidate should be pursuing UG/ PG from a recognized University/Institution.

Batches

- June
- July
- August

Program Fee

• INR 12,500/-

> Students will get Certification and Internship letter on completion.

> Top 5 ideas with projects will get 100% fee refund.

APPLICATION PROCESS

Application Submission

Last date of submission May 19th, 2024

Selected Students Announcement

Announcement of accepted candidates May 21st, 2024

Interviews

1

2

3

4

5

Accepted candidates interview schedule May 22nd-25th, 2024

Selection and Notification

Window for fee deposit May 26th-30th, 2024

Program Commence

Batch 1 Schedule **June First Week**

OUR CLIENTS

During the course of 8 years of existence, we've provided 200+ successful offline and online programs, and partnered with 70+ colleges and schools pan India.



IN PRESS

Karkhana's unique idea of a collaborative workspace for hands on experimentation for college and school children, has not only been loved by students but was recognized and appreciated by various news and media platforms as well.

Our Team and work has been featured across platforms and has been awarded on several occasions preaching his one core idea of -'innovative learning'..





















Distribution of Kits to MO School, Odisha by CV Raman Global University



Awarded as Top 20 Startup by Startup Odisha Chairman - Dr Omkar Rai



Karkhana Makers from SOA University Winners of GITEX Global 2022



Awarded as Top Startups by Shri Tusharkanti Behera



Awarded by Sudhakar Rao 40 Under 40 Startup by Edex 2018



Awarded as Top 20 Startups by Shri Ashok Chandra Panda Minister of Science and Technology of Odisha



ABOUT KARKHANA

Karkhana is an emerging EdTech company that aims to bring product development to the forefront in India and to help transform individual innovation into collective advancement.

We aspire to integrate the usage of tools and constructive technologies in the very basic format of our education system so the children are relatively less clueless and far better equipped when competing in today's fast-moving world of technology.

We provide the best combination of tools, equipment, instructors, and education to the makers and startups for rapid prototyping.

Tangible skills:

These are skills that amount directly to the professional skills of the students. Be it proficiency in Coding, Web Development, IoT, Hands-on skills in Electronics, Designing, etc. This may be measured with a system of badges, such as Open Badges, which is an offline badge system to verify skills, interests, and through achievements credible organizations.

Intangible skills:

These skills may be measured through human-scored metrics such as observation of behaviors or products such as portfolios that demonstrate the use of these skills.

FOLLOW YOUR DREAMS

WE EDUCATE, YOU INNOVATE

Hoping to get in touch with you soon!



Last date of submitting application is 19 May 2024 - 11:00 PM

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