## CODEAVOUR



Building the Future with AI, Coding, and Innovation













### **AI Education Catalysts**

### Revolutionizing Education with Al Influence



"Al and ML are the biggest developments that have happened in Computer Science in the last decade. This is good news as children of this generation have access to Al tools through Codeavour, as the jobs of the future will require these core skills."

**Asha Jadeja Motwani**Founder, Motwani Jadeja Family Foundation, USA
Philanthrophist, Inspired **10,000+** minds and made **200+** startups investment

"I strongly believe that AI, coding, and STEM learning are critical for the future success of our children and teens. Regardless of gender, background, or circumstance, every child deserves access to these essential skills."



Sara Madrigal

Community Engagement Manager, AWS InCommunities, USA

An impact creator, bridging the gender gap and advocating STEAM education



"Initiatives like Codeavour provide students with an opportunity to build 21st-century skills. The ideas for such initiatives come directly from the students themselves. Competitions like Codeavour offer a platform for developing AI knowledge, supported by Tinkering Labs that help instill the right skills in the right direction."

**Deepali Upadhyay**Program Director, Atal Tinkering Lab, NITI Aayog, India
Building innovation and entrepreneurship ecosystem, impacting **7.5M+** students

"This is advantageous as children nowadays have access to Al tools. ARTPARK, in association with STEMpedia, will continue to host such competitions for our young generation."

**Umakant Soni** 

Founded pi Ventures, ARTPARK (IISc Bangalore), Al Foundry, India Supporting early stage Al and robotics startups over a decade



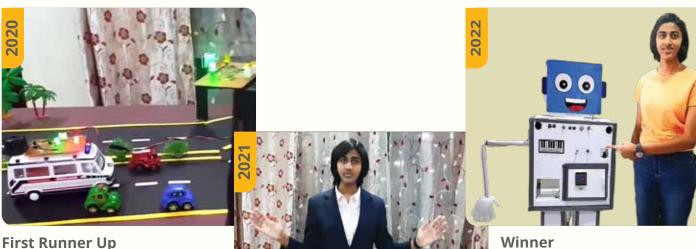
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### **Champion's Success Story**

In a world where dreams soared, Samriddhi Kori, an exceptional girl from India, emerged as a true champion. Her dedication turned her into a master of AI, coding, and robotics. Victories nurtured her skills, and she set out on a mission to heal, protect, and nurture. She brought hope of solutions to nature, and relief to society. Cities embraced her brilliance, weaving harmony with smart transportation.

Her journey spoke of compassion and brilliance, inspiring the next generation of leaders to embrace the maker culture. She became a guiding light, setting an example of how one person's creativity and vision can change the world for the better.



Rapid Health Emergency Traffic System to Minimize the **Emergency Patient Deaths** 

Sakhi - A Humanoid Robot, to be used as Healthcare Buddy, Security, Entertainer, Musician and Server

#### Winner

Smile, A Smart Helmet for the Bike Riders to Protect them from the Accident

# CODEATOUR

#### Where Young Mind Innovate

Codeavour is an International AI and Coding championship that aims to inspire children to unleash their programming potential and create innovative projects, organized by STEMpedia in collaboration with national and international government bodies and private organizations, Codeavour provides a platform for young minds to showcase their skills and passion for technology.

The name "Codeavour" is an amalgamation of "Code" and "Endeavour" which justifies the ideology behind the competition of motivating kids to show the endeavour to code for the betterment of society.

01

Develop an interest in Coding, Artificial Intelligence and Robotics 02

Develop critical thinking, creativity, collaboration and communication – the four C's of the 21st century skills.

03

Develop Problem Solving Skills and Innovation Mindset 04

Become sensitive towards the well being of the world.









### Unleashing Potential, Creating Impact

### **4 Years of Success**

### Codeavour 2022

A groundbreaking edition, breaking all previous records, with exponential growth in participation and impact, solidifying Codeavour's position as a premier international coding competition that drives student innovation and cultivates a passion for coding and robotics globally. Continuing the legacy of success, Codeavour 2022 has experienced a remarkable 230x growth in just four years since its first edition.

### Codeavour 2021

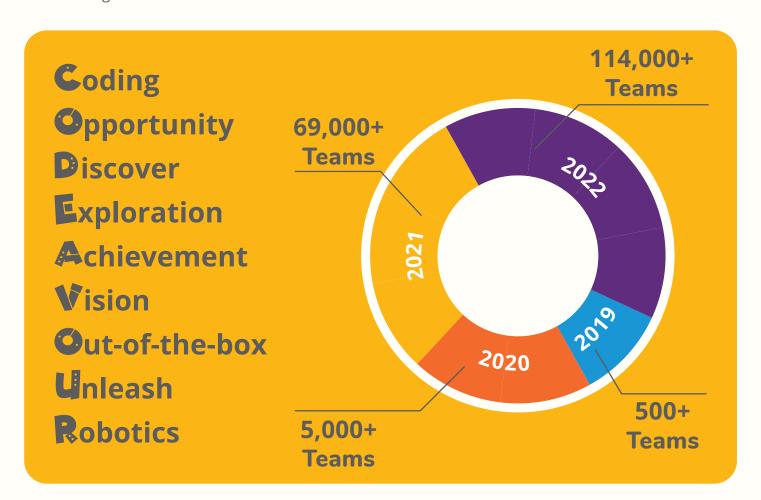
Codeavour 3rd edition saw incredible growth, with a 14x increase in participants over the 2nd edition. The competition was designed to encourage innovation in areas like environmental protection, human health, and automated surrounding. It gave young enthusiasts a stage on which to demonstrate their technical know-how and ingenuity in tackling urgent problems with coding and Al.

### Codeavour 2020

Despite its modest start, Codeavour soon grew into a platform for innovation and creativity. Codeavour 2nd edition witnessed soaring growth with a 10x increase in participant numbers compared to the previous year. Focusing on promoting innovation through AI and coding, the competition revolved around themes such as health, cleanliness, and automation of the surroundings.

### Codeavour 2019

Codeavour 1st edition began humbly with a focus on SDG themes, aiming to inspire young minds to create impactful projects. With a strong emphasis on UN SDG (sustainable development goals), the competition encouraged participants to tackle pressing global challenges through coding.







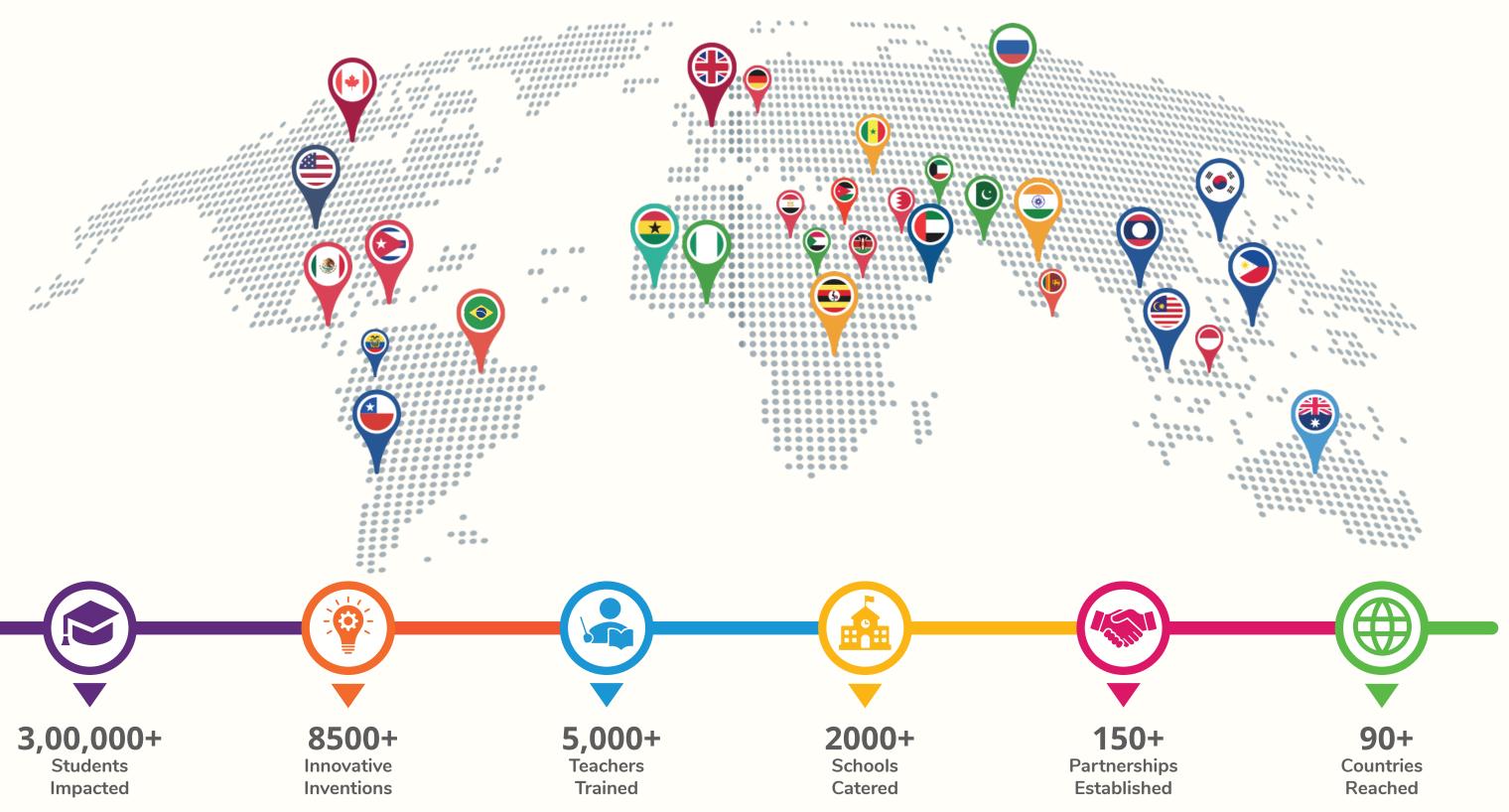








### Spreading Innovation Globally: Codeavour's Worldwide Impact!



















### **Sponsors and Major Collaborators**

### Helping Hands to Shape the Future



The vision of the Motwani Jadeja Foundation (MJF) is to create exponential change with a focus on South Asia. Vehicles for change are ground-breaking technology, academic research, and broad policy change initiatives.

The MJF Foundation invests in these individuals and initiatives to create an army of change-makers. Codeavour has been supported by the foundation to bring a change in the lives of the students. MJF has been the title sponsor for Codeavour since last 3 years.





AIM with a vision to 'Cultivate one Million children in India as Neoteric Innovators', is establishing Atal Tinkering Laboratories (ATLs) in schools across India. With the support of AIM and NITI Aayog's team, we onboarded 167+ ATL schools with 5900+ students associated with them and provided the opportunity to the young innovators to make them aware of the latest technologies like AI & machine learning.



STEMpedia was founded by IIT Kanpur Alumni to provide 21st-century skills like coding, artificial intelligence, and robotics to K-12 students with the experiential-based learning approach.

STEMpedia, as Host and Organizer of the Codeavour series, has impacted the students through their expert training and curriculum, making them future-ready by enhancing 21st-century skills and motivating them to learn coding, artificial intelligence, and robotics.



ARTPARK is a one-of-its-kind, not-for-profit (section-8) foundation promoted by the Indian Institute of Science (IISc), Bengaluru in a public-private collaborative model, to promote technology innovations in AI & Robotics. With seed funding of INR 230Cr (\$32mn) from the Department of Science & Technology (DST), the Govt. of India, and the Govt. of Karnataka, the ecosystem is designed to bring about a collaborative consortium of partners from industry, academia, and government bodies.

ARTPARK has supported Codeavour as a Co-Host in the last two editions with their expertise in the field, mentorship and collaboration with government entities.



AWS is committed to making a positive difference around the world. AWS is dedicated to building a world where every person has the opportunity to live a life of dignity on a healthy planet.

AWS InCommunities, being an Education Sponsor, has supported Codeavour 2022 reaching out to students across the globe and providing free of cost educational resources and trainings.

### **Voices that Ignite Innovation**

To motivate students, educators, and school leaders to learn and explore the field of coding and artificial intelligence, we organized a series of webinars where industry experts and educationists shared their thoughts and experiences with them.



Alice Hou Founder, Girls in STEM



Charlene Mae Sta Teresa Head, ICT & Robotics Department, International Indian School, Abu Dhabi



**Srijith Nair**General Manager, Learning Design,
Tata ClassEdge



Binita Shrestha
Chairman & Managing
Director. Women in STEM



Anni Kumar HOD CSc, Vikas Bharati Public School, National ICT Awardee



Pankaj Kumar Verma Chief Technology Officer, STEMpedia



Ivan Dorjee Lepcha Exemplary Teacher of Change, ATL in-charge, Paljor Namgyal Girls' School



Abbas Gabajiwala Director, Zephyr Toymakers



Akriti Dwivedi Program Officer, SRF Foundation



Ashwin Shah Founder & CTO, Robofun Labs



Shubham Gupta Innovation Lead, AIM, NITI Aayog



**Utami Anita**Program Manager,
Prestasi Junior



Sangita Chima Principal, Amity School,



Asna Siddiqui
Head, INDIAai, A joint initiative of
Meity NeGD and NASSCOM



**Dr. Mariam Alghawi** Director, Hamdan Bin Rashid Al Maktoum Centre



**Viraj V**Education Coordinator,
Adani Foundation

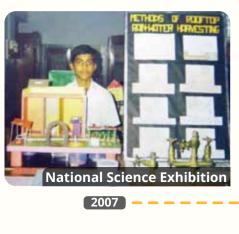
### **Fostering Maker Culture**

### The Architect's Innovation Journey

At the age of 14, Dhrupal Shah, made a self-sustainable Eco-Friendly House project, which was awarded 3rd place in the Jawaharlal Nehru National Science Exhibition for Children (by NCERT) held at IIT Kharagpur in 2007.

This accomplishment inspired him to pursue engineering in 2011 at IIT Kanpur. He was a part of various robotics competitions, industry projects like Boeing India - Abhyast Autonomous Robotics and Catalyst cleaning robot for Reliance Refinery in Jamnagar.

He followed his passion and created 'evive' with his friends and launched the first successful international crowdfunding campaign by university students in India raising 45K USD. They founded STEMpedia in 2017 to empower young innovators to create their dreams into reality.















Let Codeavour be the

ignition for 1M+ Students

**Recogintion at** 

**TiE Global Summit 2022** 

### From Hardship to Brilliance

### Inspiring Innovators from the Humble Backgrounds



In the humble abode of Goa, **Asha Irappa Kaudi** from Grade 7<sup>th</sup>, belonging to a modest background, discovered a gift within her soul. With a spark of opportunity and the gentle embrace of support, she transcended her limitations. In a small classroom at New Educational Society Institute, Curchorem, Asha was introduced to the enchanting world of coding. And there with 250 blocks code, she breathed life into the image of our beloved Mahatma Gandhi, the father of our nation.

The Coding and Robotics Scheme (CARES), brought forth by the compassionate hearts of the Government of Goa, has become a gateway for our youth and teachers to display the inspiring creativity fostered within their souls.





In the humble streets of Pune, **Ayaan Shaikh** from Grade 6<sup>th</sup> with a heart burdened by the pain of farmers and pollution, spreading diseases embarked on a transformative journey. At Mahatma Jyotiba Phule, PCMC, Teach for India, he delved into the captivating world of robotics through Robotex India's 'Build your first Robot' program. In this digital sanctuary, he learned to breathe life into machines, discovering the power to bridge the technology divide. With each line of code, his dreams grew closer, and future skills bloomed within his soul. His journey became a testament to the resilience of the human spirit, as he embarked on a path to reshape the world and bring solace to those in need. His spirit led him to the world transformation and his ability gave rise to the Agri-tractor and Garbage Collector Bot.







### Ingenious Innovations

### **Redefining Creativity through Coding Magic**

### Save the Environment

Revolutionary Ideas for a Sustainable Future



### **Automatic Home Compost Robot for Kitchen Waste Management**

#### **Arjun VG**

(7-10 yrs) India

This project is developed using Pictoblox and Arduino for kitchen waste management. Home composting has the potential to mitigate the global challenges of landfills, greenhouse gas emissions, pollution, thereby contributing to a sustainable world.



### Fire Detector Project for Green Spaces to Trigger Timely Alert

#### **George Said**

(7-10 yrs) Palestine

This system implemented to detect gas levels in green spaces during wildfires, triggering timely alerts to civil defense forces for rapid intervention, fire control, and potential rescue operations to ensure the safety and minimize damage.



### Smart Recycling Bin to Classify and Recycle the Waste Material

#### Aseer Ahmed, Ali Ahmed

(7-10 yrs) Egypt

A comprehensive and systematic sustainable waste management solution that involves the gathering, classification, and recycling of waste, thereby generating reusable resources, addressing environmental contamination concerns.



### **EcoBuddy, Your Companion for Helping in Saving the Environment**

#### Priyanka Gopinath

(7-10 yrs) UAE

An innovative companion designed to empower individuals to take proactive steps in environmental conservation. Leveraging Al and ML capabilities, EcoBuddy delivers Eco-friendly suggestions to promote climate awareness, making world sustainable.



### **Smart Fridge - Empowering** Independence to Visually Imaired

#### Leen Alfityani

(15-18 yrs) Jodan

A revolutionary smart fridge designed specifically to assist visually impaired individuals.This innovative solution incorporates product identification and expiry date reading capabilities, empowering greater independence and convenience in daily life. Experience the future of inclusive technology with our groundbreaking smart fridge designed for accessibility and ease of use.



### **SAKHI - The Humanoid Robot, A Companion for End-to-End Needs**

#### Samriddhi Kori

(15-18 yrs) India

Your Versatile Companion for Healthcare, Security, and Entertainment. Assist Alzheimer patients, Guide the Visually Impaired. Safeguard Your Home, and Provide Endless Entertainment. Powered by Evive, Multiple Microcontrollers, and AI & ML Technology for Advanced Functionality.

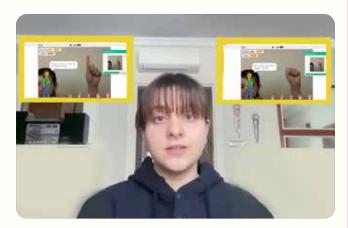


#### **Detection of Yogasana Postures for Better Yoga Practice**

#### Yashwitha Balasubramaniam, Michelle **Dominic**

(11-14 yrs) India

Embrace a fit and healthy lifestyle with our project focused on Yogasanas. Leveraging the Machine Learning extension in PictoBlox, this innovative solution accurately detects and identifies various yoga postures. Experience personalized guidance and real-time feedback as you practice yoga, enhancing your overall well-being through advanced technology.



### **Machine Learning Supported Touch-less Smart Vending Device**

### Günes İkizceli, Zeynep Karakusoglu

(11-15 yrs) Turkey

Introducing our innovative touch-less vending machine system, specially designed prioritize safety during the COVID-19 pandemic. Utilizing advanced face recognition technology, customers can conveniently select their desired products using simple hand gestures, eliminating the need for physical contact and reducing the risk of transmission.



#### **Balcony Farming for Efficient Plant Care and Nutrition**

#### **Eng Zhong Ci, Ong Yiu Shan**

(11-14 yrs) Malaysia

Experience a seamless balcony farming journey, devoid of concerns about watering, sunlight, and nutrients. Embrace a simplified and gratifying experience as advanced systems effortlessly manage plant care, transforming balcony farming into an effortless and delightful endeavor. Let nature thrive effortlessly in your urban oasis.



### **Smart Soil Detector to Empower Precise Farming**

#### **Devansh Harivallabhdas**

(11-14 yrs) India

A precise solution designed to measure soil moisture levels with accuracy, promoting optimal crop growth. Particularly valuable in hot climate regions like India, this device prevents issues stemming from over-watering or under-watering, guaranteeing high-quality and plentiful agricultural yields. Empower your farming practices with this advanced tool for sustainable and prosperous cultivation.



### **Soil Doctor for Optimizing Crop Productivity**

#### **Aditi Bhut**

(7-10 yrs) India

This project provides farmers with valuable support by enabling informed crop selection according to environmental suitability. By utilizing this system, farmers gain the knowledge and tools they need to choose the most suitable crops for their specific environmental conditions, leading improved outcomes and sustainable agricultural practices.



### WADJ, Desert Farming Robot for **Remote Supervision**

#### **Basmala Ahmed Awad Abdallah**

(15-18 yrs) Egypt

Discover the capabilities of an advanced farming sensor, powered by an Arduino processor. Specifically designed for desert farming, this stationary gadget links to a allowing user-friendly app, supervision and management. Farmers gain the ability to monitor and control their operations from any location, empowering them with convenience and flexibility.



### Smart Parking System to Secure Storage for 16+ Cars Efficiently

#### Masah Abo Alzahb, Razan Shbeb

(7-10 yrs) Saudi Arabia

Discover an innovative solution, developed with PictoBlox and Lego, that tackles the pressing parking issue. This prototype introduces a rotating mechanism, facilitating faster car movement and secure storage of more than 16 cars within the footprint of just two. Powered by renewable energy, this groundbreaking solution revolutionizes parking efficiency and sustainability.

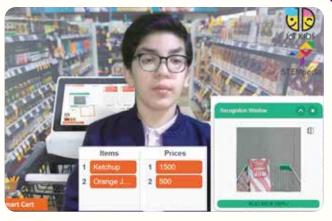


### Smart Traffic Light System to Smoothen the Traffic Flow

#### Aichouche Ilyes, Aichouche Souha

(15-18 yrs) Algeria

Introducing an intelligent traffic management system that detects emergency vehicles and optimises traffic flow by dynamically turning all lights red except for the path of the emergency vehicle. It ensures quick and safe passage by intelligently managing traffic lights based on priorities and the number of cars, promoting efficient traffic flow, and enhancing emergency response capabilities.



### Smart Shopping Cart for Seamless Shop with Smart Cart Technology

#### Abdulrahman Sataa

(11-14 yrs) Iraq

Introducing the Smart Shopping Cart, revolutionizing the customer shopping experience. With a simple QR code scan, items are effortlessly added, while machine learning identifies products and prices. The cart conveniently sends the bill via SMS and updates the customer's monthly purchase list on a Google Sheet, providing a seamless and efficient shopping journey.



### Automatic Cleaning Robot, Simplifying Household Cleaning

#### Asser El-Azab, Yassin El-Hassan

(15-18 yrs) Egypt

Introducing an advanced robotic cleaning solution that revolutionizes household chores. This innovative robot interprets hand gestures, offering seamless user control. With a powerful fan, it efficiently blows away dust, ensuring effective and efficient cleaning. Say goodbye to manual cleaning and embrace the future of hassle-free household maintenance with Automatic Cleaning Robot.



### Drive Buddy, Companion to Safe and Pleasant Driving Experience

#### Aarav Gulrajani

(7-10 yrs) USA

Introducing Drive Buddy, an intelligent driver safety prototype powered by PictoBlox. It uses the camera to detect distractions like calls or drowsiness, ensuring road safety. Drive Buddy also acts as a cheerful companion, analyzing the driver's mood and offering entertainment with jokes and music, enhancing the driving experience. Stay focused, safe, and uplifted with Drive Buddy.

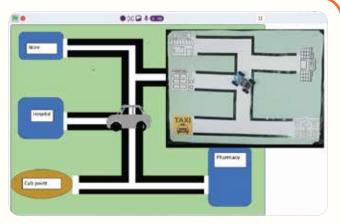


#### **Smart Traffic Signal for the Smooth Traffic Flow and Efficient Commuting**

#### Aryan Sankar, Ravi Sankar

(11-14 yrs) UAE

With the exponential population growth in India posing traffic-related challenges, our full-proof solution comes in the form of a smart traffic signal system. Featuring Bluetooth connectivity, the system establishes a default timer of 30 seconds, guaranteeing optimal traffic flow. Embrace this innovative solution to tackle traffic challenges and promote efficient commuting for all.



#### Al Cab Service to make your Travel Safe and Simplified

#### Sameeha Daredia

(11-14 yrs) Uganda

Experience a seamless Al-powered cab service that simplifies your travel. Select your destination, view the optimized route, and authenticate yourself through recognition and ID proof. Enjoy real-time journey monitoring via digital platforms, and provide valuable feedback by rating your experience at the end. Enjoy hassle-free and secure travel with our innovative cab service.



### Wireless Car Charger, for Charging **EV through Transmitter**

#### Joel Shavio M, MIJO Jeffnick P.A

(11-14 yrs) India

Our solution revolutionizes electric vehicle (EV) charging by wirelessly transferring current from a transmitter to vehicle. Inspired by the principles of EM chargers for mobile technology phones. This enhances transportation by offering convenient and efficient charging for EVs. Embrace the future of smarter & more sustainable transportation with innovative wireless charging solution.



### CODIE-19, Face Mask Detector, Enforcing Health Guidelines

#### Lithuli Payagala

(11-14 yrs) Sri Lanka

An advanced smart robot, powered by AI, ML, and NLP, safeguards school children amid the Covid-19 pandemic. With advanced sensors, it detects mask-wearing compliance and alerts non-compliant individuals, enforcing health guidelines. It can also distribute masks as needed, ensuring everyone in the school follows recommended safety protocols.



### Dr. Al, Your Child's Virtual Health Center for the Rapid Response

#### **Alexander Santoso**

(7-10 yrs) Indonesia

"Dr. Al" is a virtual health center dedicated to strengthening healthcare, especially for children. It offers a user-friendly platform for easy access to medical services, including virtual consultations with professionals. The platform provides convenient screenings to evaluate children's health and securely stores their medical records for future use.



### Virtual Triage System to Minimize Risk to the Medical Workers

#### **Azlan Mohsin**

(7-10 yrs) India

This system presents a groundbreaking solution that transforms the triage process at clinics and medical facilities by harnessing the power of Al. It enables contactless procedures and minimizes the risk of transmission to front-line medical workers. This innovation enhances the safety of healthcare environments and expedites patient care, ultimately revolutionizing the medical field.



### Future Smart Pharmacy for Robotic Prescription Filing, Data Integration

#### **Jamil Yousef**

(11-15 yrs) Jordan

This innovative automated solution transforms the conventional pharmacy experience for doctors, pharmacists, and patients. Utilizing cutting-edge technology, it simplifies enhances and pharmacy operations, benefiting all parties by saving time and effort. It incorporates new elements like robotic prescription filling and seamless patient data integration.

### State Govt. Impact Program

### **CARES Goa, For Under-represent Students, India**

**Coding And Robotics Education in Schools Scheme (CARES) Goa**, an initiative by the state government, is on a mission to develop computational and design thinking skills along with programming integrated into the school level education for the **State of Goa** to prepare students for the demands of the **21st-century** digital world. Aligned with the vision of Codeavour 2022, CARES, Goa joined as an **Education Partner** for the competition.

### **Key Highlights:**



All associated students from classes 6<sup>th</sup> to 8<sup>th</sup> were provided with an opportunity to participate free of cost in the Codeavour 2022 International.

To prepare the teachers and students for the competition, Codeavour team trained the selected students and master trainers in a physical bootcamp during the Teach for Goa event from 11<sup>th</sup> to 16th December.



3

These trained students and educators conducted a 5-day online bootcamp for the students studying in classes 6th to 8<sup>th</sup> across the entire state of Goa.

Goa's students submitted 400+ projects, showcasing creativity, determination, and inspiring admiration with their remarkable achievements in innovation.



5

The best performers were chosen and received educational STEM kits as a rewarding acknowledgment of their exceptional accomplishments.



### **Transformative Training**

### **Building Master Trainers for Tomorrow**

Training sessions were conducted on Block-based coding and Python programming, artificial intelligence, machine learning, and robotics, focusing on game design, image classification, and waste identifier development, to nurture 21st-century skills.







Available on CARES, Goa

The program received coverage in multiple newspapers across the regions of Maharashtra and Goa.



### **Projects and Winners**

- 1. Three State Level Winners were selected from class 6<sup>th</sup> to 8<sup>th</sup> and awarded with Quarky Humanoid kits.
- 2. Three State Level First Runners Up were selected from class 6<sup>th</sup> to 8<sup>th</sup> and awarded with Quarky Ultimate kits.
- 3. Three State Level Second Runners Up were selected from class 6<sup>th</sup> to 8<sup>th</sup> and awarded with Quarky Innovator kits.



**Army Security Gate Pass** 

**Team : VEDA6SINA** Vedant Sinai Kanthak Class - 6 (India)



**Chidya Uddh** 

**Team : PRAD7SAWA**Pradarsh Sawant
Class - 7 (India)



**Talking Quarky by PictoBlox** 

**Team : SREY8DESSA** Sreyash Dessai

Class - 8 (India)

### **Across Borders, Beyond Boundaries**

Recognizing Innovators Worldwide





With support of EduStream, Country partner from the UAE, Codeavour 2022 received huge participation. The EduStream team collaborated with various organizations and government bodies, such as the Hamdan Bin Rashid Al Maktoum Foundation, Amity School Dubai, and Unique World Robotics in UAE, to conduct the National Physical Event of Codeavour 2022 UAE on February 19, 2023.

The physical event took place at Amity School Dubai, attended by 300+ Students. Students' projects were evaluated by a team of 25+ Judges. 45+ awards were distributed in the ceremony to motivate the students for their amazing projects from 400+ teams.









With support of Apex Coding Academy, Country partner from Egypt, Codeavour 2022 received great participation of students from various national and international schools and onboarded 15 training partners and 8 community partners in Egypt region. Apex team welcomed the delegates from the Ministry of Social Solidarity, Ministry of Communications and Information, and Ministry of Culture, Egypt in their physical event at Luxor, Egypt on February 23, 2023. At the event, more than 60+ teams showcased their projects, and 25+ awards along with medals and certificates from 350+ teams participated.







# 790



With support of IoT Kids, country partner from Iraq, a leading Iraqi organization to teach kids coding, robotics, AI, and electronics. The goals were to guide the kids to using modern technology in right way and to gain new skills like logical thinking and innovation. In Codeavour 2022, IoT Kids ensured participation of 95 team in different age groups from Iraq. The physical event was held on February 22, 2023 with presence of many parents, representatives from the Ministry of Education and Delegates from Private Sector Companies. To motivate all the participants of the competitions the IoT Kids awarded all the 95 teams with medal and certificates.









With support of Al Jazari Robotics, country partner from Alegria, Codeavour 2022 received great participation of students from various national and international schools in Alegria. The Al Jazari team connected with various government bodies such as Ministry of Higher Education and Scientific Research, Ministry of Knowledge Economy, Start-ups, and Micro-Enterprises, and the Governor of the City in Algeria. They conducted the National Physical Event of Codeavour 2022 Algeria on April 2023 at University of Constantine.







With support of Al Jazari Robotics, country partner from Kuwait, Codeavour 2022 witnessed excellent student participation from both local and international schools in Kuwait with Milset Asia on 18th of March 2022 with overall 100+ students participation.









With the support Orientation Centre, Country partner from Sudan, Codeavour 2022. Students all across Sudan from participated in Codeavour 2022's physical event with of University Medical Science and Technology, Sudan in March 2022, where students presented their unique concepts with full energy and zeal.









With the support of Robotna, country partner from Jordan, Codeavour 2022 received great participation. During the virtue of the competition, the team also conducted training sessions for their students to support them in bringing their creativity to reality. The national event in Jordan was held on March 6, 2023, at Cultural Stadium in Amman in presence of various local collaborators and delegates from the Ministry of Youth. The top 15 teams selected from 170+ teams showcased the projects and were awarded cash prizes, medals, and certificates to motivate the students.





### International Media Coverage



### **Celebrating Achievements**

### **Inauguration and Awards**

### **Inaugration Ceremony**

The online inauguration ceremony of Codeavour 2022, the prestigious International AI and Coding Competition, has always been a momentous occasion filled with excitement.

Participants from around the world gathered virtually to witness the grand opening, where esteemed guests and dignitaries delivered inspiring speeches, emphasizing the importance of innovation and creativity in the realm of AI and coding. The ceremony set the stage for a thrilling journey of learning, collaboration, and fierce competition that awaited the talented participants.







### **Award Ceremony**

The online award ceremony of the International AI and Coding Competition, Codeavour, was a momentous occasion that celebrated the remarkable achievements of talented participants. With great anticipation, the winners were announced, their innovative projects and exceptional skills recognized by esteemed judges. The ceremony highlighted the transformative power of AI and coding, inspiring a new generation of innovators. The deserving winners received prestigious awards, symbolizing their dedication, creativity, and impact. The event served as a testament to the immense talent and potential within the global AI and coding community.





### Al Made Easy with PictoBlox

Creator Tool for Coding, AI, AR-VR and Robotics

PictoBlox is a Block-based & Python coding software that is used in Codeavour to make innovative projects. It is available across all platforms, from smartphones to laptops, that brings hardware-interfacing and Al-learning to your fingertips.

It empowers students to make interactive animations and games, program actions for robots, build Al projects with ML and AR/VR environment, create interesting projects based on IoT, and much more!





95+
Countries Reached



Rating on Playstore



1.1M+
Students Impacted



150k Monthly Active Users



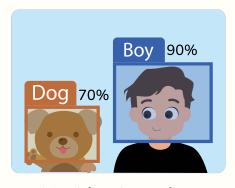
Game and Animation



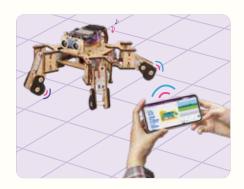
**Python Programming** 



**Artificial Intelligence** 



Machine Learning



**Robot Interaction** 



AR, VR and 3D

# **Empowering Students through Innovative Training Programs**









In order to inspire and educate students in the field of Artificial Intelligence and Machine Learning, we organized complimentary sessions on Block Coding, and Python Programming. These training sessions were conducted and were focused on enhancing the understanding of multiple topics. We have conducted more than 45+ training sessions in Hindi and English.

- 1. Introduction to Programming.
- 2. Introduction to Artificial Intelligence.
- 3. Introduction to Machine Learning.
- 4. Introduction to Robotics.
- 5. Introduction to Python Coding.

These sessions were conducted covering the concepts and hands-on activities.

**50+ Orientation Sessions** were conducted to provide comprehensive support to students participating in Codeavour 2022, ensuring a seamless registration process, clarity on the themes, motivation to create innovative solutions for global challenges, and equipping students with the necessary information and inspiring them to excel in the competition.

**100+ Doubt Solving Sessions** were conducted to address students' doubts during their learning journey and provide clarity. These sessions were particularly beneficial after completing a chapter or topic, saving students' time and ensuring a comprehensive understanding of the concepts. Students followed our training and guidance on Codeavour 2022 themes, which helped them refine their understanding and eliminate any confusion.









# Transforming Educators into Coding Champions

To motivate and teach AI & ML concepts to the students, we conducted free sessions on Block-based coding and Python Programming in English and Hindi. Empowering teachers is equally important to impact a large number of students to support them in the long run. We believe training sessions for the teachers should be kept separate to provide them with a wide knowledge of the concepts and make the knowledge transfer to students impactful. With this aim, we conducted dedicated Teacher Training Programs for training partners and for educators of AIF and SRF Foundation impacting 250+ teachers.











### Social Impact Outreach

### **Catalysts for Positive Social Change**



TATA ClassEdge was created with 25 years of international experience in the space of e-learning. With a highly energized team of multi-disciplinary specialists, Tata ClassEdge constantly innovates in pedagogy, technology, and content aimed at enhancing learning experiences for CBSE, ICSE, and various State Board schools in the K12 education landscape in India. It is with this rich experience in digital education that Tata ClassEdge was conceptualized in 2011 with the aim of improving the effectiveness of education systems in India. In Codeavour 2022, we onboarded 20+ schools with 2800+ students with TATA ClassEdge.



With an aim to contribute to the holistic development of communities, the Adani Foundation is contributing to the global agenda of meeting Sustainable Development Goals (SDGs).

Their initiatives aim to reach the remotest corners of India and engage local communities to equip them in becoming self-sufficient. Synergies between these initiatives are ushering in development that is sustainable and impacts that are measurable. In Codeavour 2022, we onboarded 200+ students with Adani Foundation.



AIF is committed to catalyzing social and economic change in India and building a lasting bridge between the United States and India through high-impact interventions in education, livelihoods, public health, and leadership development. Working closely with local communities, AIF partners with NGOs to develop and test innovative solutions and with government to create and scale sustainable impact. The American India Foundation is committed to improving the lives of India's underprivileged, with a special focus on women, children, and youth. In Codeavour 2022, we onboarded 780+ students with AIF.



In collaboration with the Agastya International Foundation, we aimed to ensure inclusivity in the competition for underprivileged children. Agastya, driven by a vision of a creative India, strives to ignite curiosity, foster creativity, and instill confidence among economically disadvantaged children and government school teachers. Through their innovative hands-on science education, project-based learning, and peer-to-peer approach, they extend their reach to schools, towns, and villages across India. As part of our collaboration, we conducted training sessions on Artificial Intelligence for over 40 educators from Agastya. These educators then utilized Agastya's Mobile Labs to provide Al training to economically disadvantaged children in rural India, spanning multiple states.



SRF Foundation believes that it is essential for companies to have a purpose more engaging than profits and that purpose should be intrinsic to the fabric of the organization. Building on this belief, SRF Foundation, formerly known as the Society for Education and Welfare Development, was set up in 1982 as the Corporate Social Responsibility (CSR) arm of SRF Limited. Drawing inspiration from its founders, Late Sir Shri Ram and Late Dr. Bharat Ram, who believed in contributing to society through education, SRF Foundation is dedicated to the transformation of education in the country. In Codeavour 2022, we onboarded 350+ students with SRF Foundation.



Gurushala is a free-of-cost online teacher training and professional development initiative implemented by Pratham Education Foundation. The initiative aims to build the capacity and skills of school teachers to effectively use digital technology to positively impact the learning levels of students. We collaborated with Gurushala and provided the content for blogs on AI & Coding Education and also provided well-curated course content for Introduction to Programming and Artificial Intelligence for Kids courses. We organised a dedicated workshop for Gurushala Teachers. Gurushala helped us to spread the word about competition among their student and teacher communities.



Lala Bahadur Chand Munjal Charitable Trust was established in 1970 by the great entrepreneurs and philanthropists Munjals of the Hero group, with the objective to provide liberal, scientific and technical education and for that purpose to build schools and educational institutions.

The Foundation, realizing that this century needs critical thinking, creativity, innovation, and digital and ICT learning, along STEMpedia has taken a pledge to provide AI Education with hands-on experience to One Lakh students through AI Bootcamps. During Codeavour 2021, more than 20 Mission AI Bootcamps were organised in which thousands of students participated and learn about coding and artificial intelligence.



Robotex India is a non-profit organisation working to provide STEAM, Robotics, Artificial Intelligence, Machine Learning, IoT education to Government Schools in urban, tribal and rural areas.

With Robotex India's support, we enabled more than 2000 rural and government school students to learn the latest technologies and take part in the Codeavour competition.



Our collaboration with INDIAai ensured the nationwide reach of this competition. As the National AI Portal of India, INDIAai serves as a central hub for AI-related resources and information, both in India and internationally. This collaborative initiative by Meity, NeGD, and NASSCOM aims to establish a trusted and comprehensive platform, supporting India's remarkable journey towards global leadership in the field of Artificial Intelligence.



The Women-Only Social Network, is more than a Social Networking Platform to Learn & share about career, cooking, relationships, health, lifestyle, and everything else to grow in life.

We collaborated with Sheroes to take this competition to girls and also conducted a webinar to discuss the role and contributions of girls in STEM, busting gender-based myths, and how to bridge the gender gap.

### **Partners and Collaborators**

### Allies in Innovation and Excellence

Country Partners
With all motivation and enthusiasm, the students across the globe started submitting their innovative projects. With our co-host and country partners in different countries, we have successfully concluded the evaluations and the award ceremony at national level from 8 countries.















Community Partners
We onboarded NGOs or NPOs, who are working for underprivileged kids, with us as community partners. Total of 30+ Community Partners was made from 11 Countries.

















































### **Academic Partners**

We onboarded schools and other educational institutions with us, as academic partners. Total of **1200+ Academic Partners** were made from **25+ Countries**.





























































### **Training Partners**

We onboarded businesses, who provide training to students in the STEM, STEAM, Coding, Robotics or Al education sector, as a training partner. We categorized them as Local, Regional, and Global partners. Total of **49+ Training Partners** were from **18+Countries**.





























































### Let's Unite to be the Impact Creators!

Our vision is to inspire and nurture young innovators, offering them a platform and tools to explore the realms of AI, coding, and robotics. We are dedicated to driving a positive change.

"Together, let's unite and collaborate, Creating an impact that resonates, Empowering young minds' innovations gate, For a futuristic tomorrow, Let's navigate."



### Pioneers of Codeavour's Excellence

Our team consists of passionate individuals with technical and educational expertise who work tirelessly to cultivate a "Do it Yourself (DIY)" aiming to cultivate a culture of innovation, creativity, and self-reliance among students, encouraging them to become a changemaker.



**Dhrupal Shah** CEO, Co-Founder STEMpedia



Pankaj K Verma CTO, Co-Founder STEMpedia



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### Reach Out to Us

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