

MAKING STUDENTS AI-READY



# ARTIFICIAL INTELLIGENCE PROGRAM

4-Week Engagement

Make up for the learning loss due to COVID-19 by bringing children close to one of the most promising emerging technologies – Artificial Intelligence (AI). Data Science and AI are evolving as essential skills for students to be future-ready and relevant. Give a chance to your child to catch up with the emerging technologies.



Trainer-Led



Dashboard



Projects



Certification



Hackathon



Skill-Oriented



“Convert Digital Inclination to Digital Skills”

SchoolforAi

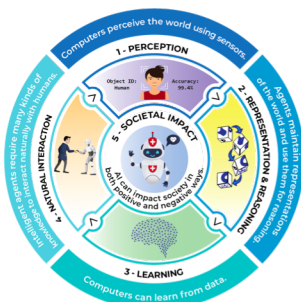
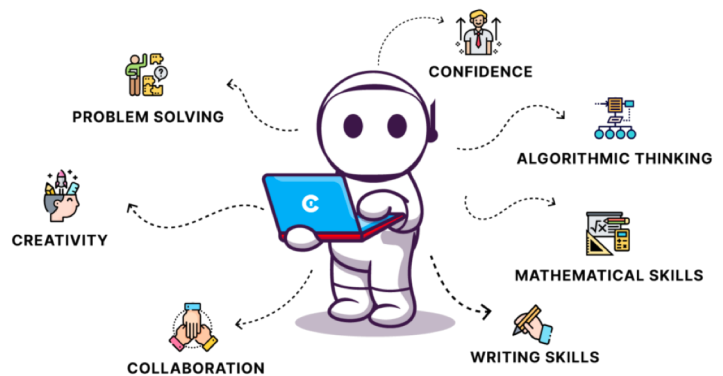
# ABOUT THE CAMP

AI Program focuses on teaching children the concepts of AI along with hands-on experience, using both Block and text coding. This unique combination helps students not only have fun but gain serious coding skills. Why to stop with Block coding when students could solve real-time social problems using AI solutions. Project based learning is the key to effectively transform the knowledge into skills. Through this program we intend to transform the students perception and approach towards Artificial Intelligence.

SchoolforAI is India's first Data Science & AI focused unique platform that includes both online mentor-led & self-paced e-learning for students of grade 7 and above to gain edge over the emerging technologies through experimental & hybrid-learning pedagogy.

## WHY AI FOR STUDENTS

AI is not just for science inclined students. It is an essential technical skill for all 21<sup>st</sup> century children. There is no career in the world that is not benefited from the AI solutions. Be it Astronomy, Marketing, or Healthcare organizations are investing heavily in AI technologies. This makes it relevant for the students to acquire these skills, irrespective of their career choices. Learning AI builds holistic skills in the students which would be handy in solving life and societal problems, to be a true global citizen.



## STEAM for Career-Neutral AI. Includes AI4K12

Following guidelines of a standardised national initiative to facilitate AI instruction for the K-12 audience.

- 1. Perception:** Understanding machine perception and how they 'hear' and 'see' the world around us.
- 2. Representation & Reasoning:** Constructing representation of the world to reason using algorithms.
- 3. Learning:** Finding the hidden patterns in the data to 'learn' and solve problems or support decisions.
- 4. Natural Interaction:** AI is currently at the child-level learning to behave, express and interact like humans.
- 5. Societal impact:** Leveraging the power of AI to find solutions for societal problems without bias.

### ENROLL

Summer camp was specifically designed for you to step into the world of Artificial Intelligence

### ENGAGE

Trainer led program with project based learning to engage you with relevant skills.

### LEARN

Program covers essential concepts and technology to make your AI-ready

### AI4GOOD

Showcase your learning by solving the real-time social problems using AI solutions



# THE PROGRAM

Curriculum designed and developed by domain experts and alumni from IIT, IIIT & IIM to prepare the students for the future. It has been carefully drafted to engage novice and experienced learners catering to their learning goals. Delivery spread over 4-weeks to facilitate knowledge transfer and skill-building.

**Week 1**

**AI Freshman**

FUN | RECOGNISE | APPRECIATE

Block Coding & AI Basics

**8 Modules**

- ✓ Evolution of machines
- ✓ What is AI
- ✓ AI in real-life
- ✓ Domains of AI
- ✓ Intro to Block Coding
- ✓ AI Applications
- ✓ CV with Scratch
- ✓ NLP with Scratch

**Week 2**

**AI Sophomore**

LOGIC | CODE | SOLVE

High Level Programming

**7 Modules**

- ✓ Getting Started with Python
- ✓ Fundamentals of Python
- ✓ Built-in Data Types
- ✓ Conditional Statements
- ✓ Control Loops
- ✓ Functions in Python
- ✓ Artificial Intelligence with Python

**Week 3**

**AI Junior**

PREPARE | ANALYSE | APPLY

Text coding for learning AI

**6 Modules**

- ✓ Introduction to Data Science
- ✓ Visualization & Dashboarding
- ✓ Exploratory Data Analysis (EDA)
- ✓ Machine Learning
- ✓ Essentials of Neural Networks
- ✓ Applications of ANN
- ✓ Projects – DS & DL

**Week 4**

**AI Senior**

PROBLEM | SOLUTION | BUILD

Text coding for implementing AI

**6 Modules**

- ✓ AI possibilities
- ✓ AI-Project Cycle
- ✓ Limitations of AI
- ✓ CV Applications
- ✓ Applying NLP
- ✓ AI4Good
- ✓ Projects – CV & NLP

₹ 10,999

- 4-Weeks, 16 Sessions
- Online Trainer-led
- AI4Good Projects
- Mentoring & Support
- 30 Hrs Engagement
- Hybrid Learning
- Hackathon Invitation
- Certification & Goodies

## 5 Core Areas of AI Applications

Simplifying the understanding of the purview of AI through analysis of its 5 core applications, thus simplify the learning and encouraging experiential learning – Explore the world of AI from Data Science to Deep Learning.



Gifts, Scholarships, Internships for grab

SCAN TO REGISTER



Gifts & Scholarships



Free Joining Kit



# Detailed Curriculum

## Week1: AI Freshman

- Introduction to Artificial Intelligence
- Rule & Learning-based Systems
- Differentiating ML, DL, AI
- Types of AI
- How AI perceives the world
- Domains of AI
- Artificial Neuron & Perceptron
- Understanding Neural Networks
- Functional Model of Brain
- Block Coding for AI
- What is Computer Vision?
- Understanding Images
- Libraries & Essential for CV
- SFEX4Scratch Extension for AI
- CV Applications through Block Coding
- Intro to Natural Language Processing
- Applications of NLP
- NLP Techniques
- Audio Vs Speech Vs Text
- NLP Applications through Block Coding

### DAY 1

### DAY 2

### DAY 3

### DAY 4

## Week2: AI Sophomore

- Introduction to Python
- Environment Overview & IDE
- Understanding Jupyter Notebook
- Keywords, Identifiers, & Statements
- Comments, Variables, Input & Output
- Data Types In Python
- Python Operators
- Data Structures - List, Tuple
- Mapping & Set
- Conditional Statements
- Control Loops
- Functions - Default
- Functions - User Defined
- Lambda
- Dictionary Mapping
- Errors & Exception Handling
- Introduction to OOPs
- Basics of NumPy
- Basics of Pandas
- Visualization with Python

## Week3: AI Junior

- Data & Its importance
- What is Data Science?
- Uni & Bi-Variate Analysis
- Data Visualization Techniques
- Introduction to Tableau
- Descriptive Statistics
- Excel for Descriptive Statistics
- Data Aggregation & Analysis
- Introducing Macros
- Exploratory Data Analysis
- Understanding Machine Learning
- EDA for Machine Learning
- Prediction Vs Forecasting
- Linear & Logistic Regression
- Classification
- Exploring Neural Networks
- Activation Functions
- Artificial Neural Networks
- Regression
- Classification using ANN

### DAY 1

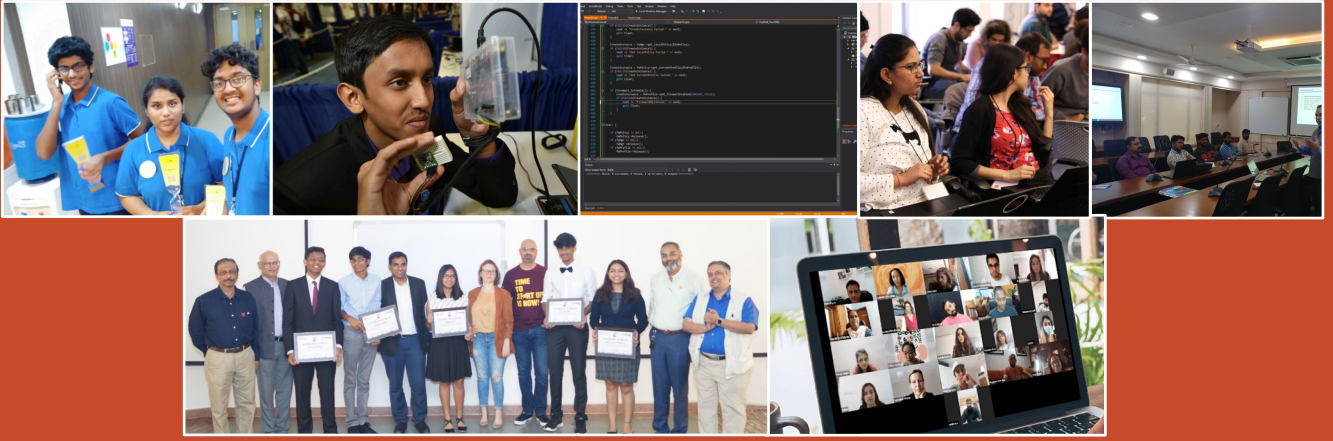
### DAY 2

### DAY 3

### DAY 4

## Week4: AI Senior

- Convolution Neural Networks
- Exploring Computer Vision
- Object Classification
- Object Detection
- Object Recognition
- Understanding NLP
- NLP Libraries
- Sentiment Analysis
- Building a Chatbot
- Auto Dictation - Speech to Text
- Introduction to Robotics
- Sensors & Controllers
- Robotics Live Applications
- IoT & Embedded Systems
- Edge AI
- AI Possibilities
- AI Careers & Opportunities
- Limitations of AI
- Biases & Ethical Issues
- AI is Boon or Bane?



ENGAGE | APPLY | EXCEL



CONTACT US

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+91-8977944951



+91-8977944952

hello@schoolforai.com  
www.schoolforai.com