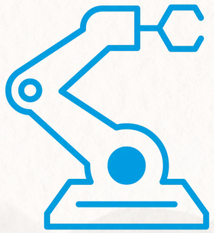
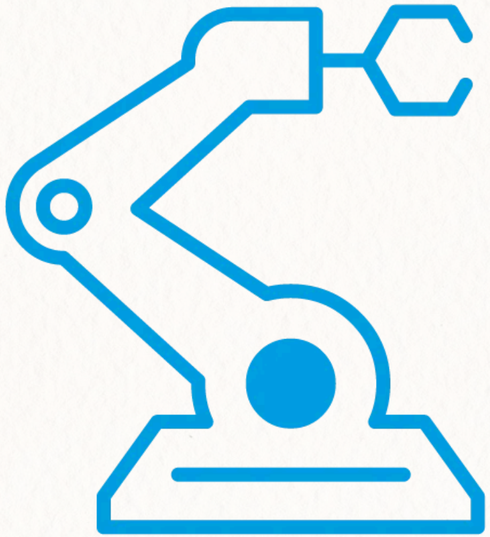
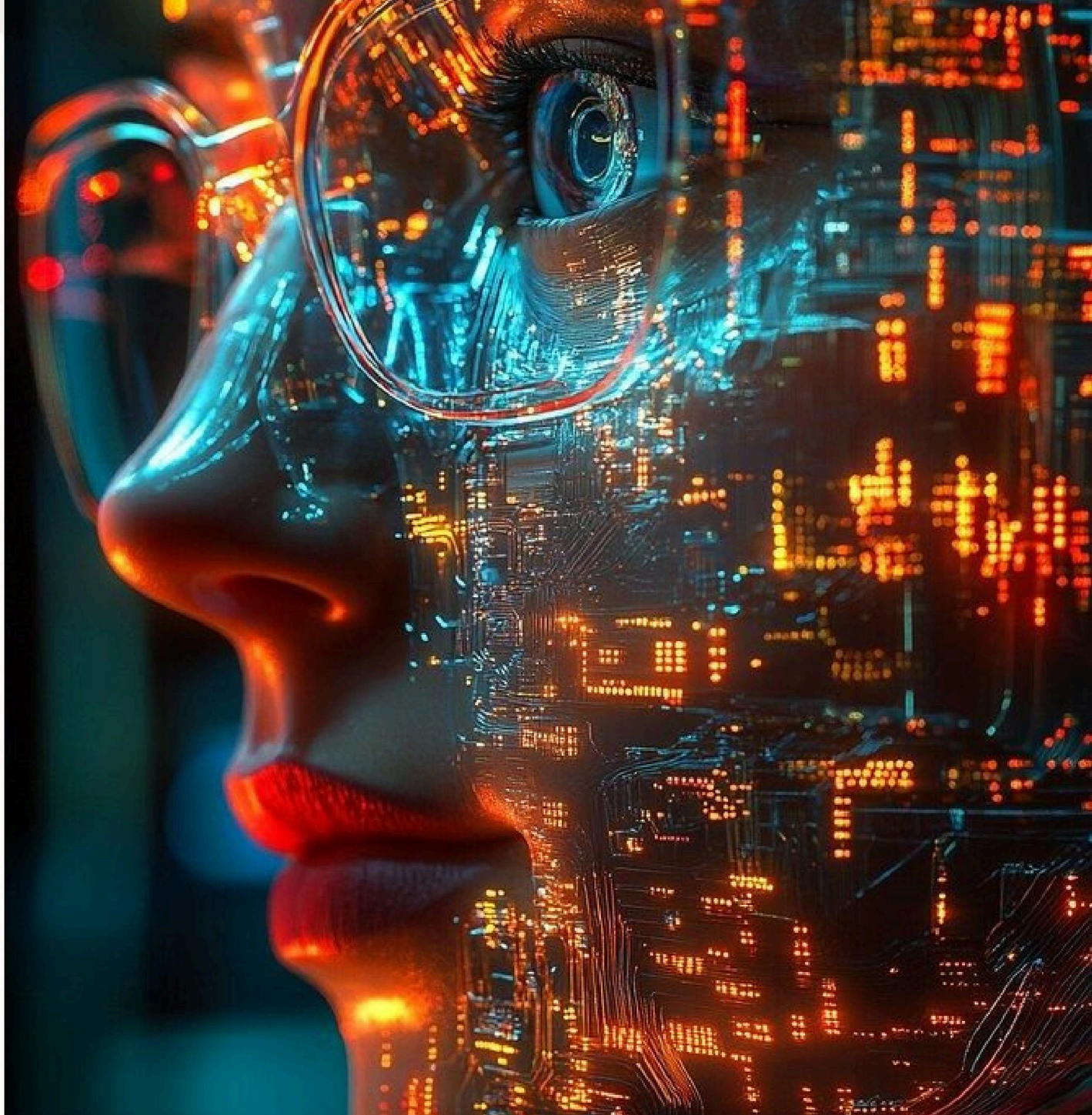
Tech bootcamp for every child.







Robotics and coding for grade 2 to 10

Intro to Robotics

- **What is robotics.**
- **Different types of robots.**
- **Parts of a robot.**
- **Advantages of robots.**
- **Disadvantages of robots.**
- **Robots and our future**
- **Ethics and robotics**

- Motors.
- Actuators.
- joints
- Human body vs robots parts.
- power source.
- Security
- vision
- Arduino
- Pictoblocks
- ESP32
- breadboarding concept

Intro to cybersecurity

Cybersecurity curriculum

- **Data protection.**
- **Data privacy.**
- **User online protection.**
- **Phishing.**
- **Malware vs ransomware.**
- **Anti-virus software evaluation.**
- **Cybersecurity talk to parents.**

Cybersecurity topics to look at:

- malware
- privacy
- kali linux
- cyber attacks mitigation
- ransomware
- phising

AI for Children

AI Curriculum

- **Intro to AI.**
- **What ids computer vision?**
- **How a self-driving car works.**
- **Face detection in image.**
- **Optical character recognition**
- **Speech recognition**

AI topics to look at:

- How our brains work.
- AI as a tool.
- Different tools that are AI.
- neural networks.
- Entity extraction.
- Forward chaining.
- Hyperparameter.
- Intent.
- Knowledge generation.
- Grounding.
- K-shot learning.
- AI reasoning.
- Agentive.
- Foom.
- Zero-short learning.

Ethics

- **What is ethics**
- **How ethics gets involved in AI.**
- **How to shape smart cities.**
- **AI as a career and its future**
- **AI contribution in national building & development**

Robotics and coding for grade 2 to 10

Hardware programming

curriculum

- **Introduction to basics of electronics.**
- **Introduction to Arduino board and programming.**
- **Introduction to ESP32 board.**

Projects

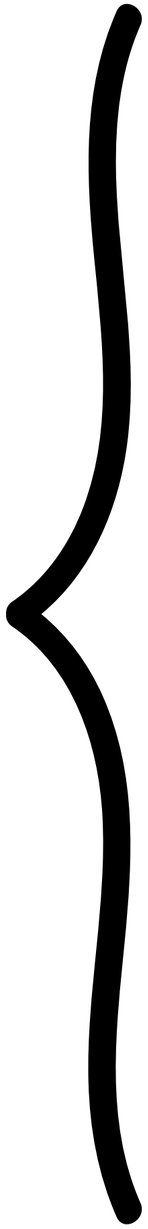
- Smart bins.
- Line following robots.
- Smart irrigation.
- smart door locks.
- smart home.
- Smart control of water pump.

Intro to Aviation

Aviation topics

- **Parts of an aeroplane.**
- **Basics of jet engines.**
- **Planes design using paper folding techniques.**
- ***ORIGAMI***

Robotics and coding for grade 2 to 10



- Digital Literacy
- Introduction to software development