



Explore Learn Create



**Math4AI,
Coding4AI,
AI & STEM AI**

For Grades 4 to 10



Why Choose Our Summer Program?

- ✓ Future-Ready Curriculum – Learn AI, Python, STEM & Math4AI with real-world applications
- ✓ Customized by Grade Level – Tailored topics for Grades 4–10
- ✓ Strong Academic Alignment – Aligned with AP Pre-Calc, Algebra, and US School District Math
- ✓ Live Online Classes + In-Person Meetups – Flexible hybrid model
- ✓ Expert Mentors – Sessions led by Math & STEM educators from top EdTech backgrounds
- ✓ Final Projects – Every child builds their own AI app, visual dashboard, or a Python-based game!



Group A – Grade 4,5,6

✓ Coding4AI Topics

- Intro to Python & Turtle Graphics
- Loops for Patterns
- Functions & Reuse
- If-Else Logic + Interactive Decisions
- Games & Simulations with Randomness
- Data with Lists & Graphs
- Mean, Median, Mode + Geometry Drawing
- Final Project – Build Day

✓ AI & GenAI Topics

- What Is AI, Really?
- AI vs ML vs DL – What's the Difference?
- Neural Networks – How AI Builds a Brain
- Generative AI – How Machines Create New Content
- ChatGPT & LLMs – Talking to Machines
- NLP & Computer Vision – Understanding the World
- When AI Plays Games – Reinforcement Learning
- DNA & Traits: The Secret Code Inside Us
- Tiny Atoms, Big World
- Let's Explore the Periodic Table
- Meet the Senses of a Robot
- CAVs: Smart Cars That Think
- Final Project



Group B – Grade 7,8,9

✓ Math4AI Topics

- Sets, Logic & AI
- Coordinates & Relations
- Data Visualization
- Central Tendency
- Probability Basics
- Simulation & Experiments
- Functions & Graphs
- Final Project

✓ Coding4AI Topics

- What is AI? Why Python?
- If-Else Logic + Decision Trees
- Loops + Simulations
- Lists, Dictionaries & Smart Data
- Functions + Modular Thinking in AI
- Build a Rule-Based AI Project
- Intro to ML & Data-Driven Thinking
- Final AI Project + Demo Day



Group C – Grade 10

✓ Math4AI Topics

- Functions, Relations, and Graphs
- Systems of Linear Equations and Matrices (basics)
- Quadratic Equations and their Applications
- Introduction to Sets, Relations, and Functions in AI Context
- Probability Distributions (Binomial, Normal Distribution – basic level)
- Conditional Probability and Bayes' Theorem for AI
- Descriptive Statistics: Mean, Median, Mode, Standard Deviation
- Basic Inferential Statistics and Hypothesis Testing (intro level)
- Vectors and their Role in Machine Learning
- Real-life Applications: Predictive Analysis and AI Model Evaluation

✓ Coding4AI Topics

- Python Recap: Functions, Lists, Dictionaries, File Handling
- Object-Oriented Programming Basics
- Introduction to Libraries: NumPy and Pandas
- Data Preprocessing for Machine Learning (basics)
- Building Simple ML Models using Scikit-learn
- Understanding Decision Trees and K-Nearest Neighbors Algorithms
- Introduction to APIs: Calling AI APIs (like OpenAI) from Python
- Creating Simple Chatbots & Recommendation Systems (basic versions)
- Error Handling and Debugging Techniques
- Mini Project: Build a Simple AI-Powered App

