

S&I Article

AI in Everyday Life

How Students Can Build Smart Tools



Artificial Intelligence (AI) is no longer science fiction. It recommends the videos you watch, corrects your grammar, unlocks your phone with face recognition, and even suggests the fastest route home. From voice assistants to smart traffic systems, AI quietly works behind the scenes in everyday life.

But here is the exciting part: students don't have to just *use* AI – they can *build* with it.

What Is AI, Really?

Artificial Intelligence refers to machines or software that can perform tasks that usually require human intelligence – like recognizing images, understanding speech, learning from data, or making decisions.

When you use translation tools, chatbots, or music recommendation apps, you are interacting with AI systems trained on large amounts of data.

Globally, companies like Google, Microsoft, and OpenAI develop AI tools that power search engines, productivity software, and conversational assistants. But you don't need a big lab to start building your own smart tools.

AI Around You

Here are a few everyday examples students can easily observe:

- Smart keyboards that predict the next word
- Face recognition on phones
- Spam filters in email
- Recommendation systems on shopping apps
- Navigation apps that avoid traffic



How Students Can Build Smart Tools

You don't need advanced degrees to begin. You need curiosity and experimentation.

1. Start with Problem - Solving

- Look around your school or community.
- Is attendance tracking slow?
- Is waste segregation poorly managed?
- Do students struggle with revision planning?

AI works best when it solves a real problem.

2. Use Beginner-Friendly Platforms

There are free tools that allow students to experiment with AI without heavy coding:

- Scratch with AI extensions
- Teachable Machine by Google
- Basic Python libraries like TensorFlow or Scikit-learn
- Simple chatbot builders

With these tools, students can:

- Build a model that identifies recyclable vs. non-recyclable waste

- Create a chatbot that answers school FAQs
- Develop a study planner that suggests revision schedules
- Design a mood-check assistant for student wellbeing

3. Combine AI with Hardware

AI becomes even more exciting when combined with robotics and electronics. Using platforms like Arduino or Raspberry Pi, students can build:

- Smart plant-watering systems
- Obstacle-avoiding robots
- Automated energy-saving lights
- AI-powered weather alerts

This blends coding with engineering – a powerful skill combination.



Think Ethically

While building AI tools, students must ask important questions:

- Is the data being used responsibly?

- Is privacy protected?
- Could the tool unintentionally harm someone?
- Is the system fair and unbiased?

AI is powerful, and with power comes responsibility.

The Future Belongs to Builders

India is rapidly becoming a global technology hub. With initiatives promoting coding and digital literacy, today's students are tomorrow's innovators.

You don't need to invent the next global platform. Start small. Build a tool that helps your classroom. Improve it. Learn from mistakes. Experiment again.

AI is not just about machines becoming smarter.

It is about students becoming smarter problem-solvers.

And the best time to start building is now.

Sudoku Challenge 2601

		2	7	8				3
					9	8		1
4					3		7	
9	5				8			
				7				
			5			4		8
	6		4					7
3		9	8					
8				3	1	6		

(Answers on Back Cover Inside)