

Chapter 1 : Foundation of AI

- **Philosophy**

The Study of Philosophy is very basic foundation of AI.

Fundamental nature of knowledge, reality and existence are considered for solving a specific problems.

How can the formal rules be used to draw valid conclusions.

Without Philosophy it is difficult to answer the following questions:

1. How does the mind arise from physical brain?
2. Where does the knowledge come from?

- **Mathematics And Statistic**

Formal Logic and probability for planning and learning

Knowledge in formal representations

- Proving theorems
- Writing Algos
- Computation etc

- **Economics**

Gain more with small investment

When to invest?

Where and how?

- **Neuroscience**

How brains transfer the information?

- **Psychology/ cognitive Science**

How do humans and animals think and act?

- **Computer science and engineering**

Logic and inference theory, programming languages, system building

Train top machine learning applications and their utilizations.

- **Control theory**

Identify and debug and solve the error itself.

- **Linguistics**

Speech recognition.

Translate speech to text and vice versa.

	"Strong AI"	"Weak AI"
Focus on models	Think like humans	Think rationally
Focus on data	Act like humans	Act rationally