



Undergraduate Program in Artificial Intelligence and Machine Learning - Course Introduction, Scope and Career Opportunities

Evolution of Artificial Intelligence and Machine Learning (AIML): Artificial Intelligence can be defined as ability of computers to think, respond and simulate like humans. Artificial Intelligence is a broad term which refers to various fields of study including Machine learning, Fuzzy logic, Robotics, Data Science, Expert Systems, Neural Networks etc.

Artificial Intelligence and Machine Learning is a course which is primarily focused on applications of Machine Learning to impart intelligence in machines to solve non deterministic problems which humans can solve with ease.

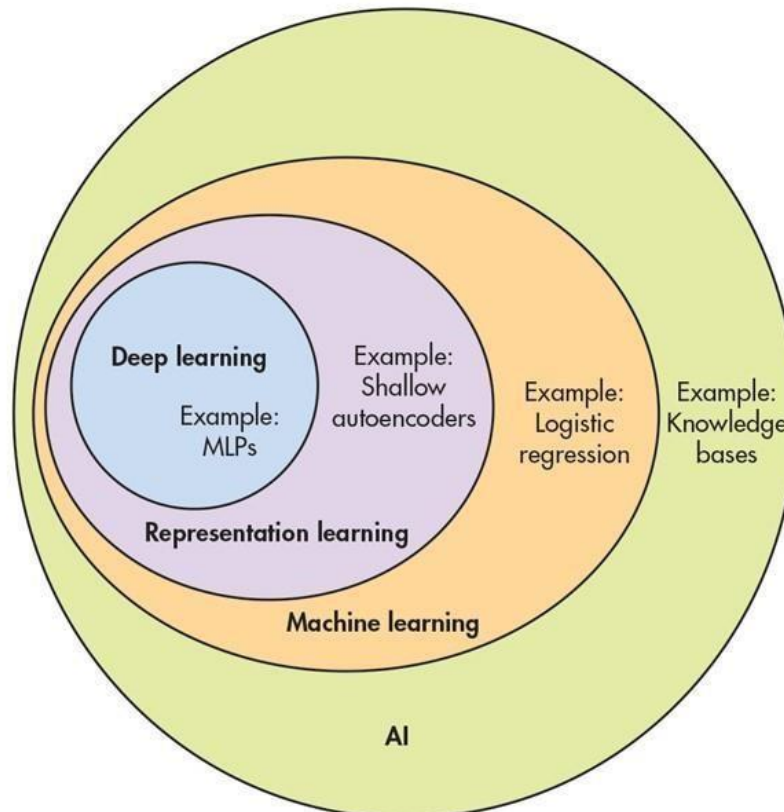




Figure 1: Artificial Intelligence and Machine Learning Venn diagram

Machine learning focuses on developing programming models which use data to learn and improve from experience without explicitly programming. This is typically useful in solving non deterministic problems where explicit instructions or algorithms cannot be developed for problem solving.

Applications of Machine learning include Online customer support, predictive analytics, computer vision, fraud detection, risk mitigation and assessment, recommendation systems, language processing, spam filtering, virtual personal assistant, surveillance, cyber security, fine arts etc.

Prerequisites to take up AIML course :

- Intermediate student with good knowledge in Mathematics (especially probability and statistics) and inclination towards programming.

Career Opportunities in AIML:

1. Machine Learning Engineer: Applications of Machine Learning are increased every day. One can build career as an machine learning engineer and contribute to development of machine learning models used in healthcare, banking, insurance, email, social media, education, gaming, fine arts etc. Industry requirement of machine learning engineers is growing at a fast pace because availability of data and compute are no more a concern.



SPHOORTHY ENGINEERING COLLEGE

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2. Data Scientist: A machine learning engineering graduate can pursue his/her career as a data scientist with ability to use data for training the models and use them in predictive analytics useful in many business organizations.
3. Natural Language Processing (NLP) Engineer: Text processing has experienced a complete transformation by virtue of machine learning and deep learning models. Machine learning engineer can contribute to development of NLP based applications used in email spam detection, text suggestions, text generation, translations from and to text and other language processing applications.

Infra Structure requirements to offer UG Program in AIML:

1. Computer Labs with at least 16 GB RAM and modern processors.
2. One Server machine to setup Distributed Processing Platform.
3. GPU based computers for implementing Neural Network based AI techniques.

Human Resource requirements to offer UG Program in AIML:

1. To impart intelligence into machines and enable machine to take decisions based on the given intelligence, it requires strong knowledge and skill set in mathematics, computing techniques, data bases, principles of computer networks, principles of software engineering and programming. Hence AI needs the contributions from Departments of Computer Science and Engineering and Mathematics.



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Why to Choose AIML Engineering Program at Sphoorthy Engineering College

1. Faculty competency is the key to quality education. In this regard, Sphoorthy Engineering College is a one stop solution for all AI aspirants because of its faculty strength. Our Faculty have certified skill set in AIML tools with rich experience, expertise and equally supported by vast experience of mathematics department.
2. Laboratory infrastructure is in place, with capability of executing any AIML application.
3. Continuous support of the management in the skill development of faculty on latest advancements in technology, infrastructure procurement and performance based incentives for faculty.
4. Our College has very strong industry and societal connect which can help students in taking up real time use cases and community service projects which will facilitate in experiential learning and quality project work.
5. Our training department is competent enough to offer training on cutting edge technologies and ensure the student's learning is in line with the industry needs.
6. Our placements team is capable of reaching out to industry leading to domain specific placement opportunities for the students.



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Hence overall development, career and professional accomplishment for a AIML aspirant is guaranteed at Sphoorthy Engineering College.

SPHOORTHY ENGINEERING COLLEGE




COMPUTER SCIENCE AND ENGINEERING

Congratulations

to the students, who has got selected in the CISCO Systems (India) Private Limited, Bangalore as a **CONSULTING ENGINEER** with the package of INR 11.3 Lacs per annum.

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We would like to thank all the Faculty coordinators, Director sir, and Secretary sir for the continuous support in making this Possible.

 Anjani Poggu 16481A0561	 Nehitha Raponagalli 16481A0562	 Yashni Rajkumar 16481A0563
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