

# AIML LEARNS EVOLVE AI & ML

AI - The Flight to your Dreams



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# **Industry Landscape**

# The Flight to your Dreams

The AI industry needs professionals who can build efficient, ethical, and scalable systems while applying AI to real-world problems. By combining **strong technical skills** with responsible **practices**, learners can stand out in this fast-growing field.



#### \$665.7 billion

Expected size of the big data and analytics market by 2030



#### 27.6% - CAGR

Expected CAGR of the global data analytics market From 2023 To 2030



#### \$4.4 trillion

Expected value added by Generative AI to the global economy annually.

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#### \$667.9 billion

Estimated Generative Al market size by 2030, growing at a CAGR Of 47.5%



#### ₹9,57,470

The average annual salary of a data analytics professional in India



# **Course Summary**

Today's organizations don't just need people who "know ML terms."

They need professionals who:

- -Understand the mathematics and algorithms behind AI/ML.
- -Can translate business problems into technical solutions. Are comfortable working with industry-standard tools and frameworks.
- -Deliver practical results through live projects and case studies.
- -This program is designed to make you industry-ready, with an end-to-end journey from programming to deep learning.

This is a complete course designed to build the foundations powering ML & AI along with a deep dive into AI & ML technologies.



#### **Course Duration:**

48 weeks



#### Course Timings:

2 hours sessions, Twice a week



#### **Instructor Support:**

Live sessions and Q&A opportunities



#### Mode:

Online/ Face - Face (Pune)



# Modules

# What will you learn?



#### Python Foundations (Weeks 1-6)

- Python programming essentials.
- Data handling with NumPy, Pandas, Matplotlib.
- Git/GitHub for professional version control.
- Mini-projects to strengthen coding fluency.



#### Mathematical Foundations (Weeks 7-24)

- Linear Algebra, Probability & Statistics.
- Calculus, Gradients, Optimization.
- Algorithms, Big-O complexity, Numerical Methods.
- Apply math concepts through hands-on coding projects.



#### Statistical Machine Learning (Weeks 25–36)

- Supervised learning: Linear/Logistic Regression, SVMs, Decision Trees, kNN.
- Unsupervised learning: Clustering, PCA, Dimensionality Reduction.
- Ensemble methods: Random Forests, Gradient Boosting.
- Model evaluation, validation, and selection.



#### Neural Networks & Deep Learning (Weeks 37-48)

- Fundamentals: Perceptrons, Backpropagation, Gradient Descent.
- PyTorch for building and training models.
- Deep architectures: CNNs, RNNs/LSTMs, Transformers.
- Applications: Computer Vision, NLP, Time-Series Forecasting.
- Capstone Project: end-to-end ML/DL solution.





# **Tools You Will Learn**



























# Who Should Enroll?

### Learners Who Will Benefit the Most

Undergraduate and postgraduate students aspiring to build a career in AI/ML

Learners seeking to bridge the gap between Python basics and applied ML

Working professionals from software or IT backgrounds

Entry-level job seekers aiming to specialize in AI/ML

Non-technical professionals transitioning into AI/ML



# **Course Outcomes**

# **Reach New Heights**



### Deep Learning (DL) Based Roles

- Computer Vision Engineer
- · Robotics Engineer
- Deep Learning Engineer
- Research Scientist (CV)
- Research Scientist (ML)
- Applied Scientist
- Data Scientist (focus on NLP)



# Machine Learning (ML) Based Roles

- ML Engineer
- ML Engineer
- ML Scientist
- ML Researcher
- Predictive Modeler
- Quantitative Analyst

# Generative AI (Gen AI) Based Roles

- Al Research Scientist (NLP)
- Al Research Scientist (ML)
- Chatbot Developer
- NLP Engineer
- Al Engineer/Researcher



# **Certification & Assistance**

Once you're done with the complete course you will receive a **Certificate**, **Assistance with Placement and Github Repository** from AIML learn.



#### Certificate



Placement Assistance





# **Ecosystem That Supports Your Success**



**Pause & Resume** from the nearest milestone and get credit back after resuming the course

**Doubt-solving sessions** to work on your problems and learn from the mistakes of your peers

Get personalized **resume assistance** to craft a professional AI/ML resume to highlight your skills and projects to impress top employers.

We help you crack the code to **ace your Al/ML interviews** by guiding you through key concepts, problem-solving techniques, and real-world scenarios.

Access all **class recordings** for 1 yr. anytime to review lessons and reinforce your learning. Never miss a session and revisit key concepts whenever you want.





# **Case Studies:**

## **Python Foundations**

- Exploratory analysis on Iris,
   Penguins, and Wine datasets;
- Titanic survival prediction with data cleaning, feature engineering, and classification.

## **Mathematical Foundations**

- Implement linear algebra operations in Python.
- Probability simulations and hypothesis testing on realworld data.
- Building optimization routines (gradient descent) from scratch.

# Statistical Machine Learning

- California Housing dataset for regression.
- Credit card fraud detection (imbalanced classification).
- Customer churn prediction using logistic regression and ensembles.
- Movie recommendation engine using collaborative filtering and matrix factorization.
- Case studies: demand forecasting, predictive analytics in business.

# Neural Networks & Deep Learning

- Computer Vision: MNIST and CIFAR-10 image classification, object detection tasks.
- NLP: Sentiment analysis on movie reviews, text classification, named entity recognition.
- Sequence Models: Forecasting time series with RNNs and LSTMs.
- Transformers: Fine-tuning pretrained models (e.g., BERT) for NLP tasks.

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# Faculty & Advisors

# The Fight to your Dreams

At Aimllearn, we deliver in-depth AI and ML education, guided by experienced educators and business leaders with 30+ years of expertise.



SHRIRANG KARANDIKAR

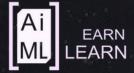
Shrirang is a doctorate (PhD.) from USA.

A passionate educator and team builder, having worked over 30 years in the fields of advanced computational technologies companies like Intel, I.B.M, and Shell. He has 7 patents, 40 peer publications









# **Hear From Our Learners**



#### Venkatesh Shaligram

Experience: Currently pursuing fourth year Btech in MIT, Pune Place: Pune

"I went to the institute to meet Dr. Karandikar sir. His Profiles, 35 years of experience is not a small deal. I was very impressed by the conversation we had and decided I have to study under him. If you're serious about AI, if you're also tired of superficial YouTube videos and you want a mentor who can really guide you, there's no better place than AIML. You should and you must join AIML if you really wanted to learn the concept of AI."

#### **Pritesh Bonde**

Industry: Software / IT | Experience: 11+ years as Full Stack Developer Place: Pune

"I've been thinking of starting an agricultural based startup and would be working with sir in the future. This course is itself helping me to make a base for my Al future. People who are thinking of learning and developing their careers in Al must visit AIML Learn."





#### Sanika Bhojraj

Professional: 10 yrs experience | Industry: Pharmaceuticals Place: Pune

"It's magical how he teaches. I had a lot of fears about AI and ML, because I'm not from that background. But he really sat me down and told me that it's just a bunch of puzzles that I would like to solve. He always makes sure that we learn each and everything. And he has vast experience. I think that helps a lot in giving proper content context"

#### Akash Bhojraj

Professional : 10 yrs experience | Industry: It- gaming, Game Developer Location : Pune

"It's been a wonderful journey of learning. I really like how sir personally talks with you and like Any doubts you have, he clears with you. It's been a good journey right now. I definitely would like to learn more and more from sir when possible."





# START YOUR AI & ML JOURNEY TODAY!

AI - THE FLIGHT TO YOUR DREAMS

Apply now

