

IoA Accredited Programme on Demystifying Artificial Intelligence for Executives





When the student is ready the teacher will appear. When the student is truly ready, the teacher will disappear.

-Tao Te Ching

Overview



In response to the surging demand for skilled professionals in the field of Artificial Intelligence, Bee-Relevant is introducing a new, intensive live-online program dedicated to AI.

Key Program Details:

Duration:

The entire training program spans a concise 5-day period, offering a rapid and focused learning experience.

Modular Learning:

Participants can expect a comprehensive 40-hour curriculum structured in a modular format, thoughtfully organized to facilitate a seamless learning progression.

Target Audience:

This program is open to executives with aspirations of becoming a proficient decision-maker in the realm of Artificial Intelligence and Machine Learning (AI and ML).

Learning Goals:

Participants will gain the knowledge and skills required to construct AI and ML models and effectively implement AI and ML solutions at the enterprise level, emphasizing practical applicability.



About Training Program:



In the contemporary landscape, Artificial Intelligence (AI) has emerged as a pivotal technology driving the progress of every organization. Proficiency in AI is poised to be the primary distinguishing factor between high-performing and low-performing companies. The utilization of AI and its core components, including statistical learning, machine learning, and deep learning, is anticipated to enhance stakeholder value, elevate customer experiences, and serve as the principal catalyst for wealth creation.

Data-driven decision-making entails the analysis of vast datasets to uncover patterns and construct explanatory models. Consequently, the ability to transform raw data into actionable insights stands out as one of the most highly sought-after skills, a demand that is projected to grow exponentially over time. AI has become an indispensable element of the growth strategy for major organizations. To maintain a competitive edge in the future, organizations must secure a pool of skilled talent capable of harnessing the immense potential for growth and research within Artificial Intelligence and Machine Learning (AI and ML).

However, there exists a substantial disparity between the demand for qualified AI experts in the job market and the available supply. This program leverages the extensive expertise of Industry Experts, combined with industry-distinguished pedagogy, to offer a hands-on experiential learning opportunity.

List of Modules



Day 1:
Python Primer for AI

Day 2:
Executive Insights:
Python-Powered Machine Learning

Day 3:
Elevate Your AI Leadership:
Python for Deep Learning

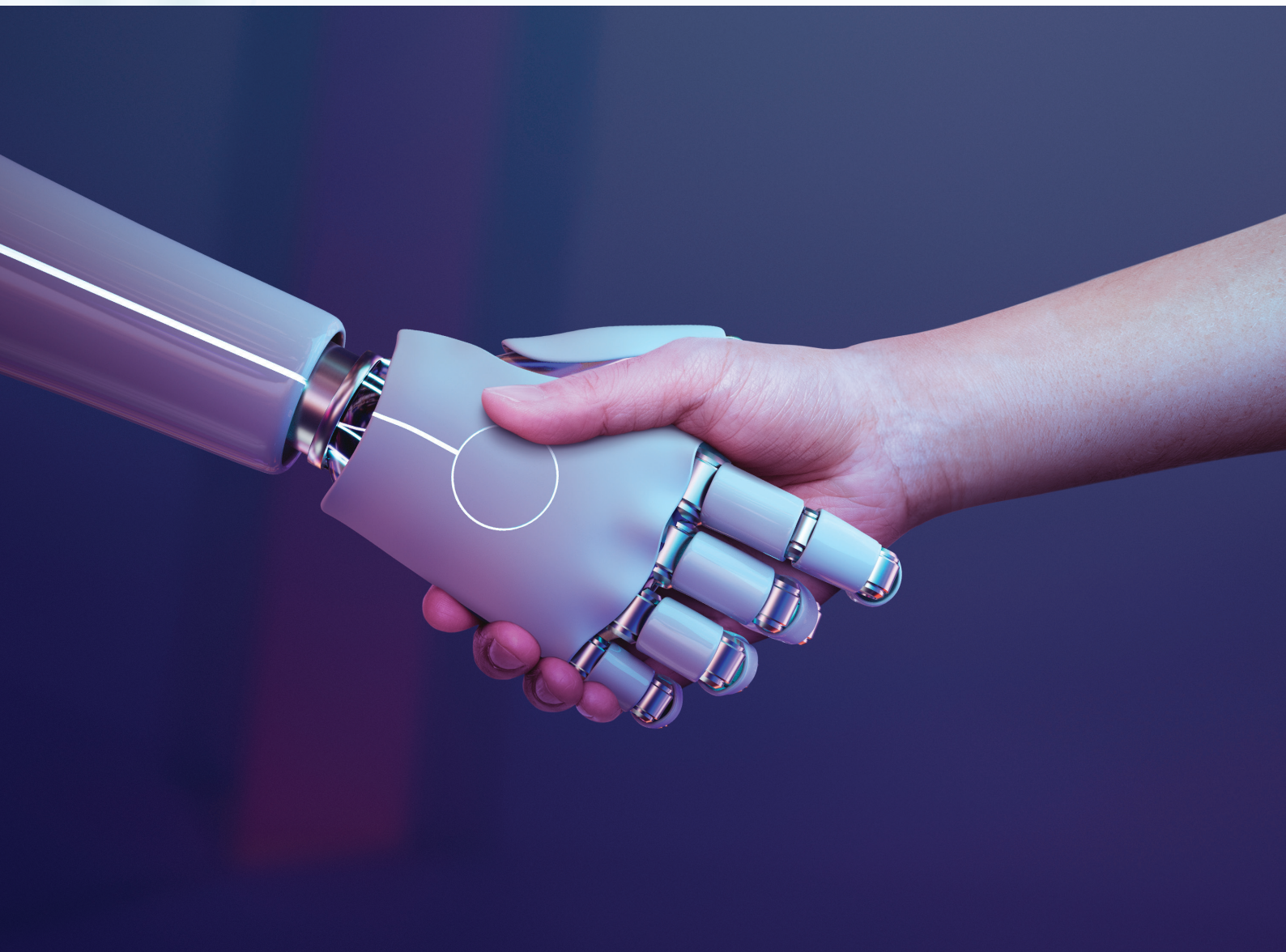
Day 4 & 5:
Generative AI





At the end of this program, the participants gain:

- Develop a strategic AI and ML vision for executives to harness innovation and enhance organizational performance.
- Equip executives with decision-making proficiency, enabling them to identify AI and ML opportunities, assess risks, and determine ROI.
- Master enterprise-level AI and ML implementation, aligning technology initiatives with business objectives.
- Excel in effective communication of AI and ML concepts to stakeholders, facilitating informed decisions.
- Cultivate ethical and responsible AI leadership, advocating for fairness and bias mitigation within the organization.
- Gain practical AI and ML experience for executive roles, facilitating the evaluation of AI-driven strategies.
- Foster collaborative leadership to drive cross-functional AI and ML initiatives and achieve organizational success.
- Learn ROI optimization strategies for efficient allocation of resources in AI and ML projects.





• Python Primer for Artificial Intelligence

The module will cover essential Python concepts and foundational libraries, enabling participants to effectively manipulate, analyze, visualize data. It will be hands-on and case-based, allowing participants to apply their skills to real-world data sets.

The objective of this module is to enable the participants to

- Achieve proficiency in essential Python concepts for effective data manipulation, analysis, and visualization.
- Handle various data formats with ease, simplifying real-world dataset navigation and management.
- Develop skills in Python-based data preprocessing for enhanced data quality.
- Gain the ability to extract valuable insights from data through basic statistical analyses using Python.
- Master the art of data visualization, creating clear and informative charts and plots for informed decision-making.

• Executive Insights: Python-Powered Machine Learning

In the contemporary business world, AI and Machine Learning have risen to prominence, earning recognition from Harvard Business Review as some of the most desirable skillsets of the 21st century. Nevertheless, the demand for experts in these fields, including data scientists and prompt engineers, is surging ahead of the available supply. This scarcity of skilled professionals can be attributed to the rapidly evolving nature of these disciplines, making the acquisition of necessary expertise a pressing concern.

This module enable the participants with the following:

- Foster a profound grasp of the data science domain, covering problem domains and foundational concepts.
- Hone data manipulation skills using Python libraries like Pandas and Scipy for efficient data handling.
- Excel in feature engineering, encompassing tasks such as managing missing data, scaling, and categorical encoding.
- Achieve mastery in various regression and classification algorithms, including Linear Regression, KNN, Decision Trees, Logistic Regression, and Random Forest.
- Develop expertise in model evaluation utilizing metrics like RMSE, R2, Confusion Matrix, Precision, Recall, and comprehend the intricacies of the model deployment process.

● Elevate Your AI Leadership: Python for Deep Learning

This comprehensive module is designed to equip participants with the essential knowledge and practical skills needed to excel in deep learning using PyTorch.

The objective of the module is to enable the participants to:

- Develop a strong grasp of tensors and their pivotal role within PyTorch, enabling efficient data handling. Additionally, become skilled in constructing input pipelines and designing and executing neural networks effectively.
- Recognize the importance of computation graphs in optimizing deep learning models. Delve into automatic differentiation for seamless gradient computation and gain proficiency in training deep neural networks for superior performance.
- Harness the power of convolutional neural networks (CNNs) for computer vision tasks and capitalize on recurrent neural networks (RNNs) and attention mechanisms for handling sequential data and enhancing natural language processing applications.

● Generative Artificial Intelligence

Generative AI serves as the foundational pillar for groundbreaking technologies like language models and innovative content creation, profoundly influencing sectors such as media, entertainment, marketing, and research.

This holistic Generative AI module is structured around three key elements: Core Principles of Generative AI, Practical Implementations of Generative AI, and Deep Learning Techniques for Generative AI.

The objective of the module is to enable the participants to:

- Gain in-depth insights into Large Language Models (LLMs) and Generative AI, covering their principles, architecture, and versatile applications.
- Master advanced techniques for effectively guiding LLMs, such as prompt design, instruction fine-tuning, and Parameter Efficient Fine-Tuning (PEFT).
- Elevate LLM performance through Reinforcement Learning with Human Feedback, involving human interaction to refine the model.
- Explore practical LLM applications in text and image generation, including Generative Image Models like AutoEncoders, GANs, Diffusion Models, and OpenAI CLIP.
- Address ethical concerns in Generative AI, including bias mitigation and responsible AI practices, through real-world case studies demonstrating its diverse applications.



IoA (Institute of Accredited Artificial Intelligence) Accreditation is a prestigious recognition that validates the competence and expertise of individuals and organizations in the field of artificial intelligence. This accreditation serves as a mark of credibility and excellence, offering global recognition and opening doors to enhanced career opportunities, professional development, and industry recognition. It signifies a commitment to maintaining high standards and ethical AI practices, making it a valuable asset in today's AI-driven world.

Accreditation



Unlock Artificial Intelligences's secrets with confidence!
Our training program is IoA Accredited, Assurance of Quality and Excellence in AI Training.





Meet Your Expert Trainers:



Naveen Kumar Bhansali

Industry Experience:

- Co-founder - CTO & AI Head at BlitzAI (No-code AI platform)
- 18 years of industry experience as AI advisory consultant, AI solution architect and engineer, data scientist, big data architect.
- Headed AI and Big Data multi-million-dollar projects in Latin America, EMEA, USA and Southeast Asia for EMC Technologies.
- Delivered production grade solutions for clients across the globe.
 - o Telecom: TIM Brazil, Hawaiian Telecom USA, MTN Nigeria
 - o Finance: AMEX USA, Itau Brazil, Bank of Thailand, Bank of Ayudhya (Thailand)
 - o Insurance: FWD Hong Kong
 - o Retail: ASOS UK, StyleUnion India
 - o Manufacturing: Embraer Brazil
 - o MedTech: Exdion India

Academic Experience:

- Adjunct Faculty for more than 10 years at IIM Bangalore (Ranked among top 30 business schools in the world).
- IIMBx Instructor for “AI for Managers”, covering Deep Learning and Generative AI. (<https://iimbx.iimb.ac.in/ai-for-managers/>)
- CFA Level 2
- Vice President of Analytical Society of India.
- Conducted hundreds of workshops and trained 1000s on Artificial Intelligence, Deep Learning etc. for corporates such as CISCO, JP Morgan, General Motors, EMC, Fidelity, Global Analytics India Pvt Ltd, etc. and several academic institutions across India.

Publications in Harvard Business Publishing:

- Customer Analytics at Flipkart.com
<https://hbsp.harvard.edu/product/IMB555-PDF-ENG>
- Breaking Barriers – Micro-mortgage Analytics:
<https://hbsp.harvard.edu/product/IMB445-PDF-ENG>



Kumar Rahul is an Engineering graduate from National Institute of Technology, Jaipur, and completed his general management from Indian Institute of Management Bangalore (IIMB). Currently, he is pursuing PhD in Quantitative Methods and Operations Management from Indian Institute of Management Kozhikode, India. His professional career spans more than 16 years. He has worked with companies like

Satyam Computers, Nokia Siemens, and Deloitte Consulting and has also been a founding member of a few start-ups. He is a founding member of AwesomeStats Consulting, which focuses on training and consulting in the field of Business Analytics. He is also a co-author of the book titled “Machine Learning using R.”

He has imparted 400+ sessions in R/Python/Julia in short and long duration programs at IIM Bangalore. As a trainer, he has undertaken equivalent number of sessions for working professionals in various corporates. Few of the prominent corporate clients, he has worked with are General Electric, Cisco, Deloitte Consulting, United Health Group, HSBC, Flipkart, Fidelity Investments, General Motors, JP Morgan, TVS Motors, Raukten, Hudson Bay etc.

As a part of the Data Centre and Analytics Lab, IIMB and Analytics society of India, he also imparted several sessions in faculty developments programs (FDP) and has conducted workshops in IIM Bangalore, PSG Tech Coimbatore, PSGIM Coimbatore, CIT Coimbatore, LBSIM New Delhi, Christ University Bangalore, IMT Hyderabad, JIM Trichy, SRM Chennai, SDM Mysore.

For over 7 years, he worked as a consultant at Data Centre and Analytics Lab, IIMB. He has executed several analytics projects for large corporates. Few of his assignments in the field of Analytics include: predicting credit scoring for cooperative banks of Karnataka, renege/attrition issue for an Indian retail company, net promoter score for a reputed medical equipment manufacturer and design issues for a leading U.S. auto manufacturer, forecasting sales and warranty for a leading auto manufacturer, detecting anomaly for a paper-based consumer products company based out of the U.S., analyzing the turnaround time for claim settlement and claim denial in healthcare insurance in India and fraud in earnings management by companies. Some of his publications are:

- Rahul K., Dinesh Kumar U. (2021) Machine Learning using R. In Book, Wiley India. Springer, Cham
- Rahul K., Seth N., Dinesh Kumar U. (2018) Spotting Earnings Manipulation: Using Machine Learning for Financial Fraud Detection. In: Bramer M., Petridis M. (eds) Artificial Intelligence XXXV. SGAI 2018. Lecture Notes in Computer Science, vol 11311. Springer, Cham
- Invited talk on “Using Machine Learning Algorithms to Detect Earnings Manipulations” at 5th International Conference on Business Analytics and Intelligence, IIM Bangalore 11th-13th December 2017.
- Paper on “Predicting Net Promoter Score (NPS) to Improve Patient Experience at Manipal Hospitals” published at Harvard Business Publishing, September 2017.
- Paper on “Behavioral Modeling to Predict Renege” published at Harvard Business Review, January 2016.
- Paper Presentation at CMMI conference organized by CMMI Institute, 10-11 Dec 2014 at Shenzhen, China.
- Paper Presentation at SEPG Europe conference organized by SEI | Carnegie Mellon University, 5-7 June 2012 at Madrid, Spain.

He has also undergone workshop on the usage of statistical models and techniques from ISI Bangalore. His other certifications include DB2 certification from IBM and ISO 9001:2008 lead auditor certification by DNV India.



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