Machine Learning for HR Training Course

Professional Development Training Course Outline

Category	Human Resource Management	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

In the rapidly evolving business landscape, Human Resources (HR) is no longer limited to traditional processes of recruitment and employee management. The integration of Machine Learning (ML) and Artificial Intelligence (AI) in HR functions is transforming talent acquisition, employee engagement, performance analytics, and retention strategies. Machine Learning for HR training course equips HR professionals, data analysts, and business leaders with practical knowledge to leverage advanced ML algorithms for predictive hiring, employee analytics, and workforce optimization, driving data-driven decision making and organizational excellence.

The course combines hands-on practical exercises, real-world HR case studies, and interactive learning modules to empower participants to harness the full potential of ML in HR. Participants will explore how ML tools can identify talent patterns, predict attrition, personalize learning experiences, and enhance overall HR efficiency. By the end of the program, learners will gain a competitive edge in the digital HR ecosystem, bridging the gap between traditional HR practices and next-generation intelligent HR solutions.

Programme Curriculum

Machine Learning for HR Training Course

Introduction

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Course Duration

5 days

Course Objectives

1. Understand core Machine Learning concepts relevant to HR.
2. Apply predictive analytics for recruitment and attrition management.
3. Leverage AI-driven employee engagement tools.
4. Utilize data-driven performance evaluation techniques.
5. Implement talent acquisition optimization using ML algorithms.
6. Analyze employee sentiment and behavior patterns.
7. Enhance workforce planning through predictive modeling.
8. Integrate HR dashboards for actionable insights.
9. Design personalized learning and development programs with ML.
10. Ensure bias-free AI recruitment and evaluation.
11. Optimize compensation and benefits strategies using analytics.
12. Build HR AI strategy and roadmap for organizational growth.
13. Evaluate real-world HR case studies to apply ML in decision-making.

Target Audience

1. HR Managers and Executives
2. Talent Acquisition Specialists
3. HR Analysts and Data Specialists
4. Learning & Development Managers
5. Workforce Planning Professionals
6. Business Analysts in HR
7. Organizational Development Consultants
8. Senior Leadership Teams looking to adopt AI in HR

Course Modules

Module 1: Introduction to Machine Learning for HR

- Overview of **AI and ML in HR**
- Key ML algorithms for HR analytics
- Importance of **data-driven HR decisions**
- Understanding HR metrics and KPIs
- Case Study: Predicting employee attrition at a tech company

Module 2: Talent Acquisition and Recruitment Analytics

- Using ML for **candidate screening**
- **Predictive hiring models**
- Reducing hiring biases with AI

- Enhancing recruitment efficiency
- Case Study: AI-driven recruitment success in a multinational firm

Module 3: Employee Performance and Productivity Analysis

- ML-based performance evaluation models
- Identifying **high-potential employees**
- Predicting training needs
- Integrating HR dashboards for insights
- Case Study: Performance improvement through predictive analytics

Module 4: Employee Engagement and Retention

- Measuring employee sentiment using AI
- Predicting turnover and attrition trends
- Personalized engagement strategies
- Enhancing retention using data-driven insights
- Case Study: Retention strategy at a large service organization

Module 5: Learning & Development Optimization

- Personalized learning recommendations using ML
- Predicting skill gaps
- Aligning training with career growth
- Evaluating L&D program effectiveness
- Case Study: AI-driven L&D transformation in a Fortune 500 company

Module 6: Compensation and Benefits Analytics

- Optimizing salary structures with ML
- Predicting incentive effectiveness
- Benefits personalization using AI insights
- Analyzing compensation patterns
- Case Study: Enhancing employee satisfaction via predictive benefits analysis

Module 7: Workforce Planning and Analytics

- Predictive modeling for workforce needs
- Scenario planning using ML
- Talent pipeline analysis
- Aligning workforce strategy with business goals
- Case Study: Workforce planning transformation at a global retail chain

Module 8: HR AI Strategy & Implementation

- Developing a roadmap for AI adoption in HR
- Governance and ethical AI in HR
- Integrating ML tools with existing HR systems
- Measuring ROI of HR AI initiatives
- Case Study: End-to-end HR AI adoption in a multinational organization

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

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