AI Technology for Executive Leadership

Platform	Linux, Windows, macOS	**Level**	Intermediate
Format	Onsite and Virtual	**Audience**	Technical Managers

Course Overview

The "AI Technology for Executive Leadership" training is a comprehensive program designed for high-performing tech managers. This 60-hour course spans 15 weeks, offering a strategic overview of AI technology. Participants will explore the fundamental benefits, architectural considerations, and real-world applications of AI, with a particular emphasis on the strategic reasons for adopting AI services. The course prioritizes understanding the "why" behind AI decisions, ensuring that executives can align AI strategies with their organization's business objectives.

This highly interactive bootcamp includes a blend of discussions, case studies, group projects, and hands-on simulations to foster practical understanding and engagement. Each session is crafted to provide insights into the strategic advantages, potential pitfalls, and key challenges associated with AI adoption. By the end of the course, participants will be equipped with the knowledge and skills to drive their organization's AI strategy, optimize costs, enhance innovation, and manage risks effectively, ensuring a successful implementation of AI technology.

Course Duration

- Total Hours: 60
- Weekly Hours: 4
- Total Weeks: 15

Week 1-2: Introduction to AI Technology

1.1 Course Kickoff and Objectives

- Introduction to the course
- Setting expectations and objectives
- Understanding participants’ backgrounds and goals

1.2 Overview of AI

- Definition and history
- Key concepts: Machine Learning, Deep Learning, NLP, Computer Vision
- Major AI frameworks and platforms

1.3 Benefits of AI

- Enhancing decision-making
- Automating processes
- Driving innovation and growth

Interactive Activity: Group discussion on current AI knowledge and expectations

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Week 3-5: AI Strategy and Architecture

2.1 Developing an AI Strategy

- Aligning AI strategy with business objectives
- Assessing organizational readiness
- AI adoption frameworks

2.2 AI Architecture Fundamentals

- Key architectural principles
- Data infrastructure for AI
- Model development and deployment

2.3 Overview of AI Platforms and Tools

- Core AI platforms and solutions
- AI cloud services
- Introduction to AI model management

Interactive Activity: Case study analysis on successful AI strategies

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Week 6-8: Use Cases and Real-World Applications

3.1 Use Cases for AI Adoption

- Predictive analytics
- Personalization and recommendation systems
- Autonomous systems and robotics

3.2 Industry-Specific AI Use Cases

- AI in healthcare
- AI in finance
- AI in retail and e-commerce

3.3 ChatGPT and Generative AI

- Overview of ChatGPT and generative AI models
- Applications and use cases in various industries
- Benefits of generative AI in enhancing customer experiences and operational efficiency

3.4 AI Copilots

- Introduction to AI copilots
- Benefits and applications of AI copilots in different domains
- Examples of AI copilots improving productivity

Interactive Activity: Brainstorming session on potential AI use cases within participants' organizations

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Week 9-10: Benefits and Value Proposition

4.1 Cost Management and ROI

- Understanding AI economics
- Cost management tools and techniques
- Case studies on cost savings

4.2 Innovation and Competitive Advantage

- Accelerating time-to-market

- Enabling innovation through AI solutions
- Examples of innovative AI-based solutions

4.3 Value of Generative AI Solutions

- Enhancing productivity with generative AI
- Transforming content creation and customer interaction
- Case studies on successful implementation of Generative AI
- ChatGPT and GitHub Copilot
    - Overview
    - Benefits of using Generative AI tools
    - Anti-patterns and success stories

Interactive Activity: Group project on creating an AI value proposition for a hypothetical company

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Week 11-12: Challenges and Risks

5.1 Common Pitfalls in AI Adoption

- Overestimating capabilities
- Data quality and integration issues
- Ethical and bias challenges

5.2 Managing AI Risks

- Governance and compliance
- Security and privacy best practices
- Managing AI model transparency and explainability

5.3 Ethical Considerations of Generative AI

- Addressing bias and misinformation
- Ensuring responsible use of generative AI
- Strategies for ethical AI deployment

Interactive Activity: Scenario-based discussions on overcoming AI challenges

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Week 13-14: Interactive Simulations and Practical Exercises

6.1 Instructor-led Hands-on AI Simulations

- Building basic AI models
- Configuring data pipelines
- Monitoring and managing AI models

6.2 Generative AI Practical Exercises

- Creating generative AI applications for content creation
- Evaluating and improving generative AI models

6.3 AI Copilot Practical Exercises

- Using GitHub Copilot for software development tasks
- Analyzing the impact of AI copilots on productivity

6.4 Group Exercises

- Simulated AI project development
- Data privacy and ethical AI planning
- Performance optimization scenarios

Interactive Activity: Group presentation on the simulated project outcomes

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Week 15: Course Review and Final Assessment

7.1 Course Review

- Recap of key learnings
- Open Q&A session
- Sharing of additional resources

7.2 Final Assessment

- Group project presentations
- Individual reflections
- Course feedback and closing remarks