

Al Literacy Starting Guide

Securing the benefits of AI through literacy for all

Al literacy promotes knowledge so that we can make informed decisions regarding Al systems. Microsoft has an extensive knowledge base of Al literacy materials developed over years of experience as a leader in the field of Al. Microsoft's Al literacy materials are designed for individuals with different levels of Al education, experience, and roles. Al literacy requirements under the EU Al Act¹ are applicable to deployers and providers of Al systems which take effect on February 2, 2025. While you will need to assess how these requirements apply to you in the specific context of your organization and the context in which you use and deploy Al systems, Microsoft's Al literacy materials provide a starting point to help you comply with these requirements.

Microsoft's Office of Responsible AI has curated a list of AI literacy materials to get you started on your learning journey. This guide is geared towards three different technical knowledge and experience levels: fundamentals, intermediate, and advanced. You can choose to begin your learning path based on your experience level. A selection of key responsible AI resources are included for both intermediate and advanced learners, to ensure that you can access these materials no matter where you begin your AI literacy journey.

We have categorized materials for different **contexts** and **roles**: Using AI and Developing AI. We have also identified educational materials that include topics on Responsible AI. We have chosen a selection of materials that work with different learning styles, ranging from blog posts to webpages to modular coursework with video lectures. This list is a subset of the many AI educational materials available from Microsoft intended to get you started. We invite you to begin your AI literacy journey here.

1. Article 4 of the EU AI Act states: "Providers and deployers of AI systems shall take measures to ensure, to their best extent, a sufficient level of AI literacy of their staff and other persons dealing with the operation and use of AI systems on their behalf, taking into account their technical knowledge, experience, education and training and the context the AI systems are to be used in, and considering the persons or groups of persons on whom the AI systems are to be used."

Navigating this guide

Category	Description
Fundamentals	Introductory resources, primarily focused on using AI tools and understanding AI basics, with an introduction to responsible AI practices.
Intermediate	For both users and developers of AI, introduces more complex ways to use AI as well as heavier focus on responsible AI, transparency, governance, mitigating AI risks and impact of AI systems.
Technical/Advanced	Includes links to technical learning paths for a variety of roles, individual resources listed are primarily for developers of AI systems and include a developer toolkit and courses for deployers of AI systems, with in-depth responsible AI practices to ensure the safety and inclusive benefits of AI.
Using Al	Using AI may include casual AI searches to automating entire workflows: interacting with AI systems for information retrieval, summarization, insights, creativity, editing, organizing, recommending, and more.
Developing AI	Developing AI means creating products, services, tools, practices, or integrations that use AI. This includes downstream providers who may not directly develop the AI system but provide an integrated AI model from another source.
Responsible AI	An approach to developing, assessing, and deploying AI systems in a way that is safe, secure, and transparent. Microsoft's Responsible AI Standard is a framework that guides the development of AI systems based on six principles: Fairness, Reliability and Safety, Privacy and Security, Inclusiveness, Transparency, Accountability ⁴ . Responsible AI ensures a balanced understanding of the opportunities and risks of AI.

Getting started with AI Fundamentals

Al Fundamentals is a good starting point if you:

- 1 want to refresh yourself on how people are talking about fundamental AI concepts
- 2 are curious about how AI works, but have not used it very much yet
- 3 are not sure of the best ways to use AI in your work or daily life
- 4 have a role that does not directly build AI, but interact with those who do

After completing AI Fundamentals, learners will be able to:

- Describe and define common terms used when discussing Al
- Understand basic concepts relating to responsible Al
- Apply and practice concepts learned through these trainings

Resource	Categories	Overview	Experience level
10 Al terms everyone should know Microsoft Source	Using Al Developing Al	This website provides an overview of AI terminology commonly found in the media and press. Knowledge of these terms provides a baseline for AI Literacy.	Fundamentals
Explore Al basics Microsoft Learn	Using Al Developing Al	This module provides a brief overview of AI history, and compares the definitions of AI, machine learning, and natural language processing.	Fundamentals
Fundamental Al concepts Microsoft Learn	Using Al Developing Al	This module introduces fundamental AI concepts to help you understand basic machine learning, computer vision, natural language processing, generative AI, and responsible AI. The module includes videos of examples to illustrate these different concepts.	Fundamentals Intermediate

Getting started with AI Fundamentals (cont.)

Resource	Categories	Overview	Experience level
Al for beginners Microsoft Copilot	Using AI	A collection of articles about topics related to AI, including: What is AI?, What is machine learning?, and how to use prompts to get the best results?	Fundamentals
Fundamentals of Generative AI Microsoft Learn	Using Al Developing Al	In this module, you explore what language models are and how they are used. You also learn how generative AI enables the creation of copilots and how prompts affect your copilot responses.	Fundamentals
Explore Responsible AI Microsoft Learn	Using Al Developing Al Responsible Al	In this module, you will explore basic concepts related to developing and using Al responsibly.	Fundamentals
Copilot learning hub Microsoft Learn • Step 1: Understand Copilot • Step 2: Adopt Copilot	Using Al	Modules and articles to understand and adopt Microsoft 365 Copilot. Choose your learning path to get started with prompting and adopting Copilot for your productivity.	Fundamentals

Getting started with AI Fundamentals (cont.)

Resource	Categories	Overview	Experience level
Explore Al For All Microsoft Learn	Developing Al Responsible Al	A video series that explores how AI is transforming accessibility, job roles, and humanitarian efforts using real-world examples and case studies.	Fundamentals
Embrace Responsible Al Principles And Practices Microsoft Learn	Using Al Developing Al Responsible Al	This module is designed to help you adopt responsible AI practices in your organization. It offers an overview of Microsoft's AI principles, governance approach, and procedures for organizations to get started on their own responsible AI journey.	Fundamentals
Reflecting on our Responsible Al program: three critical elements for progress Natasha Crampton – Chief Responsible Al Officer Blog (2023)	Using Al Developing Al Responsible Al	This 2023 article reflects on how organizations can be successful in developing a responsible AI program and leveraging lessons from Microsoft.	Fundamentals
Transform your business with Microsoft AI Microsoft Learn	Using Al Developing Al Responsible Al	This learning path contains modules designed for business leaders, including an introduction on how to adopt and scale AI in your organization. This module also provides links to related learning paths for a variety of contexts, including: healthcare, finance, sustainability, retail, and manufacturing.	Fundamentals

Intermediate AI resources

Al "Intermediate" is a good starting point if you:

- 1 have some experience using AI, but would like to boost your AI competencies
- 2 manage or collaborate with others working with Al
- 3 understand the basics of how AI functions, and are now curious about best practices

After completing AI Intermediate Resources, learners will be able to:

- Provide examples of generative Al
- Identify and describe examples of responsible AI practices
- Give examples of AI safety measures and risk mitigation

Resource	Categories	Overview	Experience level
10 (more) Al terms everyone should know Microsoft Source	Using Al Developing Al	An overview of terms related to development of generative AI models, including terms such as: grounding, small language models, and orchestration.	Intermediate
Craft effective prompts for Microsoft 365 Copilot Microsoft Learn	Using Al	A learning path with guided activities for effective prompting strategies. These include summarizing documents, visualizing data, highlighting key action items from meetings, and learning to provide Context to Copilot for better results. This series of modules is an example of learning content created with the help of AI.	Intermediate
Empowering responsible Al practices Microsoft Responsible Al	Using Al Developing Al Responsible Al	A collection of articles that demonstrate responsible AI approaches across a variety of areas: cybersecurity, content moderation, Azure AI tools, deepfake detection, and more. Assumes a fundamental understanding of generative AI.	Intermediate
Responsible AI transparency report Microsoft Office of Responsible AI (2024)	Using Al Developing Al Responsible Al	The 2024 Responsible Al Transparency Report is an in-depth report of progress at Microsoft, detailing efforts across development processes, content safety, red teaming, transparency notes, Al governance and evaluation. It includes case studies, tools, customer commitments, safety frameworks, and research initiatives.	Intermediate Advanced

Intermediate AI resources (cont.)

Resource	Categories	Overview	Experience level
Responsible Generative Al Microsoft Learn	Developing Al	This text-based module provides an in-depth, step-by-step process of developing responsible generative AI within the context of Azure AI Studio. The module includes how to identify, prioritize, and mitigate potential harms and includes an exercise in creating content filters. You need an Azure subscription to participate in the exercise.	Intermediate
The Microsoft Responsible AI Standard, v2 Microsoft Office of Responsible AI (2022)	Using Al Developing Al Responsible Al	In-depth, written descriptions that define product development requirements for responsible AI in the areas of: Accountability, Transparency, Fairness, Reliability & Safety, Privacy & Security, and Inclusiveness.	Intermediate
Measurement is the key to helping keep Al on track Microsoft Source (2024)	Developing AI Responsible AI	An article that provides practical tips on measuring and assessing risks in Al.	Intermediate
Fundamentals of machine learning Microsoft Learn	Developing Al	A module for the developer interested in machine learning fundamentals: training data, regression, classification, clustering, and deep learning. Important fundamentals underpinning some generative AI methods. The included exercise requires an Azure subscription.	Intermediate
Al Impact Assessment Guide Microsoft Responsible Al (2022)	Developing AI Responsible AI	This text-based guide provides support for completing the Responsible AI Impact Assessment, which is part of Microsoft's Responsible AI Standard. This guide includes a series of team-based collaborative activities.	Intermediate Advanced
Human Al experiences toolkit Microsoft Research and Aether	Developing AI Responsible AI	The toolkit is for teams building user-facing AI products. The toolkit includes an overview, a library of design patterns, a workbook, and an interactive playbook to identify common NLP failures.	Intermediate

Technical/Advanced AI deep dive

Al "Technical/Advanced" is a good starting point if you:

- 1 use or develop AI on the job regularly, or work with those that do
- 2 understand how AI functions as well as best practices for using/developing AI, and now want to optimize your AI use and development
- 3 you are in an engineering role

After completing the Technical/Advanced AI Deep Dive, learners will be able to:

- Able to identify the risks and benefits of leveraging generative AI for their work.
- Demonstrate how to measure and mitigate against potential risks and harms
- Articulate the components of Transparency Notes

Resource	Categories	Overview	Experience level
Expand your AI skills by role Microsoft Learn	Using Al Developing Al	The Microsoft Learn website includes a section in which you can "expand your Al skills based on your role." Role choices include: Developer, Business or Technical Leader, Business User, IT Professional, Data Scientist, Data Professional, Low-Code Developer, and Security Professional.	Technical/Role-specific
Fairness-related harms in AI systems: examples, assessment and mitigation Microsoft Research (2021)	Developing Al Responsible Al	A video lecture that delves into a variety of fairness-related harms. This video covers concepts such as assessment methods for allocation harms and quality-of-service harms and unfairness mitigation algorithms.	Advanced
Copilot learning hub Microsoft Learn (2024) • Step 3: Extend Copilot • Step 4: Build Copilot	Using Al Developing Al	Learning paths to extend Copilot with plugins and extensions, or build a custom Copilot to suit your own productivity needs or to create Copilots to provide value to your users. These learning paths include step-by-step guides from Azure Al as well as how to building custom bots in Copilot Studio. You must have access to Copilot Studio and Azure Al Studio to participate in the exercises.	Advanced

Technical/Advanced AI deep dive (cont.)

Resource	Categories	Overview	Experience level
Evaluate generative AI applications Microsoft Learn	Developing Al Responsible Al	Using code-first exercises, evaluate generative AI applications. This module requires an Azure portal and understanding of Python.	Advanced
Operationalize AI responsibly with Azure AI studio Microsoft Learn	Developing Al Responsible Al	This module requires an Azure portal and understanding of Python. You will explore Azure AI studio's tools for generative AI, security, privacy, and quality.	Advanced
Planning red teaming for large language models (LLMS) and their applications (2024)	Developing Al Responsible Al	This article provides strategies for how an organization can set up and manage red team for responsible AI throughout the product life cycle.	Advanced
Responsible AI toolbox Microsoft AI	Developing Al Responsible Al	This website contains links to Responsible AI practical tools, a quiz, dashboard and video. The website includes a link to a Responsible AI Toolbox GitHub repository. The Responsible AI Toolbox is a collection of integrated tools and functionalities to help operationalize Responsible AI in practice. In addition, learn about tools like Microsoft Purview to reduce risk. Microsoft Purview is a family of solutions to secure and govern data across your data estate while reducing risk and meeting compliance requirements.	Advanced
Accelerate your Al projects with a comprehensive toolkit Microsoft Developer	Developing Al	Comprehensive development toolkits from Microsoft + NVIDIA to accelerate application innovation. Includes AI/ML services, AI development frameworks, operations and management, and security and compliance resources.	Advanced
Responsible AI for developers Microsoft Learn (2024)	Developing Al Responsible Al	A collection of modules and articles for AI application developers to skill up on Responsible AI principles and practices. Modules include: Train a model and debug it with Responsible AI Dashboard, Embrace responsible AI principles and practices, Assess AI systems by using the Responsible AI Dashboard, and getting started with Azure AI studio to analyze text and image content with appropriate safety measures. Some of the modules require knowledge of Python and Azure AI Studio.	Advanced

Technical/Advanced AI deep dive (cont.)

Resource	Categories	Overview	Experience level
Responsible AI transparency report Microsoft Responsible AI (2024)	Using Al Developing Al Responsible Al	In-depth report of responsible AI progress at Microsoft, detailing efforts across cybersecurity, content safety, red teaming, transparency notes, AI governance and evaluation. It includes case studies, tools, and customer commitments, safety frameworks, and research initiatives. Note that this material is considered both intermediate and advanced and appears at both learning levels.	Intermediate Advanced
Al impact assessment guide Microsoft Responsible Al (2022)	Developing AI Responsible AI	This text-based guide provides support for completing the Responsible AI Impact Assessment, which is part of Microsoft's Responsible AI Standard. This guide includes a series of team-based collaborative activities. Note that this material is considered both intermediate and advanced and appears at both learning levels.	Intermediate Advanced
Govern and protect sensitive information in the age of Al Microsoft Learn	Using Al Developing Al Responsible Al	This module fosters skills in securing and governing data within AI-driven environments. The modules focus on using Microsoft 365 and Microsoft Purview for governance and compliance. This path enhances your understanding of adapting security and governance strategies in response to the evolving landscape of AI technology.	Advanced
Transparency documents Microsoft Responsible Al	Using Al Developing Al Responsible Al	This webpage includes a listing of Microsoft products and their corresponding transparency documentation. Transparency Notes are intended to help you understand how our AI technology works, the choices system owners can make that influence system performance and behavior, and the importance of thinking about the whole system, including the technology, the people, and the environment.	Advanced

Technical/Advanced AI deep dive (cont.)

Resource	Categories	Overview	Experience level
Al risk assessment for ML engineers Microsoft Security (2024)	Developing Al Responsible Al	This article provides ways to assess the security posture of an organization's Al systems. It provides a comprehensive perspective to Al system security, outlines threats to critical Al assets and guidance to secure them, and a framework for organizations to easily integrate Al security risk assessments.	Advanced
Al threats Microsoft Security Blog (2024)	Developing Al Responsible Al	A collection of articles identifying AI risks and mitigation strategies, such as how Microsoft discovers and mitigates attacks against AI guardrails and staying ahead of threat actors in the age of AI.	Advanced
Github Copilot fundamentals Microsoft Learn	Using Al Developing Al Responsible Al	Introductory learning path to coding with an AI pair programmer, to understand how to utilize GitHub Copilot across various environments responsibly and securely, as well as advanced functionalities of GitHub Copilot. Learn more about how developers are boosting their productivity: How AI makes developers ' lives easier, and helps everybody learn to develop software.	Advanced

The information provided is intended for informational purposes, does not constitute legal guidance, and should not be viewed as a complete statement of the requirements of the law, nor the actions necessary to comply with any requirements of the law. Please consult a legal professional for legal advice tailored to your specific circumstances.