Getting started with AI functions - Prerequisites

Transform and enrich data seamlessly with AI functions

With Microsoft Fabric, all business professionals—from developers to analysts—can derive more value from their enterprise data through Generative AI, using experiences like Copilot and Fabric data agents. Thanks to a new set of AI functions for data engineering, Fabric users can now harness the power of industry-leading large language models (LLMs) to transform and enrich data seamlessly.

AI functions harness the power of GenAI for summarization, classification, text generation, and so much more—all with a single line of code:

- Calculate similarity with ai.similarity: Compare the meaning of input text with a single common text value, or with corresponding text values in another column.
- Categorize text with ai.classify: Classify input text values according to labels you choose.
- Detect sentiment with ai.analyze_sentiment: Identify the emotional state expressed by input text.
- Extract entities with ai.extract: Find and extract specific types of information from input text, for example locations or names.
- Fix grammar with ai.fix_grammar: Correct the spelling, grammar, and punctuation of input text.
- Summarize text with ai.summarize: Get summaries of input text.
- Translate text with ai.translate: Translate input text into another language.
- Answer custom user prompts with ai.generate_response: Generate responses based on your own instructions.

It's seamless to incorporate these functions as part of data-science and data-engineering workflows, whether you're working with pandas or Spark. There is no detailed configuration, no complex infrastructure management, and no specific technical expertise needed.

Prerequisites

- To use AI functions with Fabric's built-in AI endpoint, your administrator needs to enable the tenant switch for Copilot and other features powered by Azure OpenAI.
- You also need an F64 or higher SKU or a P SKU. With a smaller capacity resource, you need to provide AI functions with your own Azure OpenAI resource using custom configurations.
- Depending on your location, you may need to enable a tenant setting for cross-geo processing. Learn more here.

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Note

- AI functions are supported in the Fabric 1.3 runtime and higher.
- By default, AI functions are currently powered by the gpt-3.5-turbo (0125) model. To learn more about billing and consumption rates, visit this article.
- Although the underlying model can handle several languages, most of the AI functions are optimized for use on English-language texts.
- During the initial rollout of AI functions, users are temporarily limited to 1,000 requests per minute with Fabric's built-in AI endpoint.

Applying AI functions

Each of the following functions allows you to invoke Fabric's built-in AI endpoint to transform and enrich data with a single line of code. You can use AI functions to analyze pandas DataFrames or Spark DataFrames.

Tip

To learn about customizing the configuration of AI functions, visit this article.