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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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Foreword

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 42, *Artificial intelligence*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

Introduction

This document provides a collection of use cases of artificial intelligence (AI) applications in a variety of domains.

In total, 132 AI use cases were submitted by experts between July 2018 and the end of November 2019. In this document, the term “use cases” means “collection of submitted use cases”.

The rationale for this document is as follows:

— illustrating the applicability of the AI standardization work across a variety of application domains;

— input to and reference for AI standardization work;

— sharing the collected use cases in support of AI standardization work with external organizations and internal entities to foster collaboration;

— reach out to new stakeholders interested in AI applicability;

— establishment of liaison organizations to collect requirements for AI via use cases;

— by investigating use cases, it is possible to find the new technical requirements (standardized demand) from the market, accelerating the transformation of science and technology achievements.

While a bottom-up approach was used to collect use cases, a top-down approach is used in this document to identify AI applications, and their deployment models, and their application domains., which is shown in Clause 5.

The first step taken to collect use cases was to identify application domains of AI systems (described in Clause 5) and to provide a use case template (described in 6.4 and Annex B). Contributors were requested to submit use cases using the provided template.

For improving the quality of use cases, a guidance was provided for contributors. The guidance included identified acceptable sources (described in 6.3) and AI characteristics (described in 6.4) for preparing use cases.

In this document, subclause 6.5 includes basic statistics of use cases. Subclause 6.6 and Annex C describe the findings from use case analysis.

The use cases were grouped and categorized according to the identified application domains. In this document, use cases are summarized and grouped according to the application domains in Clause 7. Readers of this document can find use cases of specific application domains and their original submissions at https://standards.iso.org/iso-iec/tr/24030/ed-1/en.

AI is an emerging field with use cases and solutions with a wide range of maturity and success. The descriptions are given for the convenience of users of this document and does not constitute an endorsement by ISO.

Information technology — Artificial intelligence (AI) — Use cases

1 Scope

This document provides a collection of representative use cases of AI applications in a variety of domains.

2 Normative references

There are no normative references in this document.