



P3195.1

Type of Project: New IEEE Standard Project Request Type: Initiation / New PAR Request Date: 02 Aug 2022 PAR Approval Date: 21 Sep 2022 PAR Expiration Date: 31 Dec 2026 PAR Status: Active

1.1 Project Number: P3195.1

1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Project Title: Standard for Common Core Ontology (CCO)

- 3.1 Working Group: Ontology Standards Working Group(C/SAB/OSWG)
 3.1.1 Contact Information for Working Group Chair: Name: James Schoening
 Email Address: james.schoening@ieee.org
 3.1.2 Contact Information for Working Group Vice Chair:
- None 3.2 Society and Committee: IEEE Computer Society/Standards Activities Board(C/SAB)
 - 3.2.1 Contact Information for Standards Committee Chair: Name: Kwok Shum Au Email Address: edward.ks.au@gmail.com
 - 3.2.2 Contact Information for Standards Committee Vice Chair: Name: Jon Rosdahl Email Address: jrosdahl@ieee.org
 - **3.2.3 Contact Information for Standards Representative:** None

4.1 Type of Ballot: Individual

4.2 Expected Date of submission of draft to the IEEE SA for Initial Standards Committee Ballot: Aug 2024

4.3 Projected Completion Date for Submittal to RevCom: Aug 2025

5.1 Approximate number of people expected to be actively involved in the development of this project: 20

5.2 Scope of proposed standard: This standard defines a mid-level ontology that specifies a set of welldefined terms and relations commonly used across multiple domains. It enables conforming extension ontologies to re-use these terms and introduce only the more specific terms and relations of their respective domains.

5.3 Is the completion of this standard contingent upon the completion of another standard? Yes

Explanation: This standard must conform to IEEE P3195 Standard for Requirements for a Mid-Level Ontology. These two standards need to be developed in parallel, since this standard will help validate the requirements of IEEE P3195. They cannot be combined into one standard, since IEEE P3195 is designed to accommodate more than one mid-level ontology.

5.4 Purpose: This document will not include a purpose clause.

5.5 Need for the Project: This standard enables:

a. Ontology developers to create new ontologies for new applications as extensions from well-structured top, mid, and domain level ontologies, for higher quality and lower cost than uniquely created ontologies, and which enables standards-based data models to be extracted from these new ontologies.

b. Project staff to integrate data by mapping data models having disparate semantics to standard top, mid, and domain level ontologies and then transform instance data into a conforming model having a single, uniform semantics, which enables independently developed applications to query and analyze the integrated data.

c. Knowledge Engineers to create Knowledge Bases in conformance to this standard ontology, enabling automated reasoning and analytics by independently developed applications.

d. \Box Machine Learning (ML) engineers to automate the labeling of ML training data sets and to provide ML output in a standard format.

6.1 Intellectual Property

6.1.1 Is the Standards Committee aware of any copyright permissions needed for this project? No

6.1.2 Is the Standards Committee aware of possible registration activity related to this project? No

7.1 Are there other standards or projects with a similar scope? No

7.2 Is it the intent to develop this document jointly with another organization? No

8.1 Additional Explanatory Notes: This project will develop a specification document, which will incorporate open source components (e.g., Common Core Ontology) developed under IEEE SA Open.