



Value of CTDL for AI

The use of AI in relation to credential and skill data is changing the way credential providers, educational institutions, product vendors, government agencies, and others are creating data-driven solutions. This affects Credential Engine's work because AI and machine learning are very quickly evolving for applications like skills mapping, learning opportunity recommendations, and career exploration. The [Credential Transparency Description Language](#) (CTDL) and structured data in the [Credential Registry](#) provide significant advantages for improved accuracy and relevance in these applications.

What is Structured Data and Why is it Important for AI?

Structured data refers to information that is organized in a systematic way with a clearly defined format, schema, or model. Each data element is usually labeled or tagged with a clear identifier, and the relationships between different data elements are well-defined.

Structured data is important for AI because it allows for the data to be easily understood, searched, analyzed, and processed. It enables AI systems to efficiently access, process, and “learn” from data, leading to better applications, predictive capabilities, and overall AI performance.

When data is not in a structured format, it leads to a higher risk of unreliable information being fed into these processes and misapplied.

The Value of CTDL for AI

The CTDL schema and CTDL data in the Credential Registry are highly useful for training and refining AI models because they are structured data that is organized, predefined, and formatted consistently. CTDL JSON LD offers specific benefits as structured, linked data that clearly defines the relationships between credentials, programs, courses, competencies, skills, jobs, pathways, and more, across over 1000 different terms. The more data available in CTDL, the more thoroughly AI tools can analyze patterns in the linked open data and make valuable connections.

A Call to Action

Our goal at Credential Engine is to provide reliable and consistent structured data for AI applications that power skills mapping, learning opportunity recommendations, career exploration, and more. Credential Engine is working with partners on innovations that combine CTDL as a rich data schema, the huge body of CTDL data that is already in the Credential Registry, and new AI-assisted tools that publish to and consume from the Credential Registry. The more structured data we have in the Credential Registry, the more reliable information will be fed into these machine learning tools. Publish your CTDL data today!

If you are interested in learning more about CTDL and machine learning or want to learn more about Credential Engine, please reach out to info@credentialengine.org.

