Deep Learning and Large Language Models

What is a Large Language Model (LLM)?

Large Language Models (LLM) are a form of artificial intelligence (AI) that operates on large blocks of text and other types of non-standard data such as sensor data, web applications, audio/video files, and complex scientific data that traditional coding cannot easily navigate. An LLM or series of LLMs can be trained to understand specific topics and retrieve contextual information to provide answers to a user's plain language question.

Gain Deeper Understanding with an LLM

If you have a tool or an application that provides spatial or keyword searches to retrieve information, an LLM solution is worth exploring. An LLM solution can provide users contextual and spatial answers rather than just a list of results, along with direct access to the primary documents or datasets answers are derived from. LLM solutions can also remove the need for manual data management workflows required to continually categorize and catalog resources as they are added to a system.

These solutions can be deployed as a standalone application, like a chatbot, as an integrated part of an enhanced search capability, or as part of a larger workflow to extract and analyze complex data from one or more sources.

Secure and Scalable Custom Solutions

Large Language Models should be focused on *your* data and deployed in a secure environment that is not offered by open AI solutions. NV5 recognizes the needs of every organization is unique and works with clients to design a secure and scalable solution with the LLMs and cloud architecture that best suits the requirements.
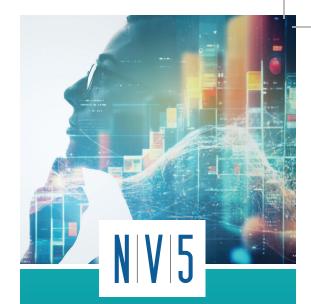
In addition, while other organizations can create or train an LLM solution, few have the experience of NV5 in working with and understand the complexities of geospatial data. By combining our geospatial domain knowledge with AI, we ensure that any location-based insight is accurate, context-aware, and seamlessly integrated into broader workflows.

Deploy Quickly and Start Learning

You don't need much to start out, just a repository of documents or data, a basic cloud infrastructure, and a willingness to be involved! NV5 can develop a custom LLM solution to get started working on your data in your environment quickly. We will work with your system architects to deploy an LLM solution that will be sustainable to manage, as well as work with your subject matter experts to use their experience and contextual knowledge to train the models. The training process is simple, it's as easy as asking a question and giving thumbs up or thumbs down to the response in a prompt interface!

Reach out to discuss how NV5 can help you generate insights.

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NV5 is the world's leading geospatial authority driving data and analytics, system integration and software innovation to transform the way organizations and industries enact meaningful change across their communities and the world.