Abstract. Advancements in Generative AI and machine learning are leading to new opportunities that can improve how we work, live, learn and interact with one another. However, translating these technology advancements from the research lab into effective and responsible business solutions remains a key challenge. This seminar talk explores this critical gap, taking IBM Watsonx Assistant and the customer service business domain as a case study to show the path from foundation models to real-world AI assistants. We will explore emerging techniques for deploying and adapting large language models (LLMs) and other foundation models within business environments. We will include a short primer on how to customize and fine-tune models for relevance to task. We will discuss the data, data science evaluation, software engineering and user experience design challenges encountered when developing and scaling AI assistants with generative capabilities. We will showcase “grounded generation,” a technique designed to minimize hallucination and improve accuracy in AI responses.

Biography. Mr. Eric Wayne serves as Senior Technical Staff Member and Senior Manager for IBM Watsonx Assistant. As the lead for AI in IBM’s Watsonx Assistant, Eric is responsible for the R&D of the generative AI, foundation models and machine learning capabilities that power virtual assistants in the platform. Eric and his team of data scientists and engineers have a long-standing collaboration with IBM Research for topics from foundation models, scalability, and the intersection of technology and user experience to solve problems for clients. Watsonx Assistant currently serves more than 1% of the world's population every month and has over 400,000 machine learning models under management.