

Deloitte: AI Project Description

Fall 2023 - Spring 2024



Deloitte Consulting: Al for Space

Company introduction

For more than 175 years, Deloitte has advised clients through industrial and technological revolutions. Today, as government and commercial entities enter or expand their presence in the space frontier, new challenges will likely arise in their business operations. Success, from a business perspective, may not come easily. Deloitte Space offers a unique depth and breadth of space experience with a globally connected space practice with clients ranging across the civil, defense, and commercial – and ultimately plays an integral role in helping these companies and agencies prepare for the challenges and opportunities they will face in the new space market. More on what we do – and how we do it – can be found on our website.

Project prompt

As a professional services firm we provide capabilities and services to clients by understanding the implications new technologies has on our clients' businesses, and suggesting ways to capitalize accordingly. Artificial Intelligence has the potential to provide value in ways that we have yet to develop. In the Fall semester, you will identify the opportunities for space companies to leverage AI technology, building a strategic vision, conducting a market scan, and making recommendations on how to move out on implementing AI in space. In the Spring semester you will take your recommendations and build a prototype AI product, demonstrating the concept of operations for AI in space.

Fall Semester Spring Semester

You will:

- Identify critical applications/implications for Al space operations use cases.
- Build a strategic vision for how space companies should leverage AI within a, or multiple parts, of the space operations value chain.
- Conduct a market scan for space- focused
 Al technologies, especially related to parts of the space operations value chain.
- Create and recommend an AI solution which you believe space organizations should be utilizing, leading to a prototype developed in the Spring semester.

Deliverable:

You will present your research findings and analysis on your vision for an Al-enabled space industry with recommendations on how space companies should

You will:

- Build upon the research conducted in the Fall semester, developing and showing how your recommended AI solution provides immediate value.
- Develop the mission concept of operations (CONOPs) for recommendation/solution of choice.
- Build an end-to-end prototype of recommendation or solution of choice.

Deliverable:

You will actualize your recommendation – both in terms of strategic planning – and in terms of developing an actual prototype to demonstrate



start leveraging AI today, and the pathway for proliferated AI operations in space.	scalability/functionality.

Company mentor(s)

- Primary: Joe Mariani
 Joe is senior leader with Deloitte's Center for Government Insights. He is an expert in emerging technology (including AI) and innovation within both commercial businesses and National Security agencies.
- Secondary: Conrad Hong, Kyra Terenzino, Adam Routh
- Coordinator: Sarah Horn

Who we're looking for

We value diversity of students and backgrounds! We need sharp technical and strategic minds who are precise, thoughtful and excited to not only shape strategy, but also execute. For this project in particular, students with the ability to apply software engineering and programming skills in addition to strategic visioning skills will be particularly helpful in developing an AI prototype.

Additional information

- Deloitte Space is always thinking about how we can better serve our clients and help them fulfill their space and non-space goals. Please look at <u>our account types</u> to better understand what types of clients we service and to logically think through what types of goals they might need our help achieving.
- Please take diligent notes on your methodology and assumptions! We understand firsthand that working in a highly nascent market often means relying on less abundant research; you are all extremely smart and we trust your logical/business judgment, so please keep diligent records of methodology and assumptions for everyone to refer back to.