

Artificial Intelligence: Machine Learning

Applus+ IDIADA's experience in **Artificial Intelligence** and **Machine Learning** projects are related to the company testing and engineering activities such as [Human Factors](#), CAE development and objective testing.

- **Human Factors and Subjective evaluations:** The objectification of subjective passenger sensations and the correlation between physiological data and vehicle performance/functionality.
- **CAE processes development:** Improvement of processes by prediction of results in simulations and improvements through automation of analysis and interpretation of results.
- **Objective testing:** Automatic checking of the quality of the data, [development of ADAS/HAD perception models](#), automation of data analysis and interpretation of results.



IDIADA success in developing Machine Learning projects is supported on the strong collaboration between different areas of expertise that are available in the company and the alignment with external client demands: [Data science and engineering, software development](#) and experts in the vehicle functionality and engineering processes.

This approach allows us to optimally manage:

- The requirements and perspectives of the business areas
- Definition of use cases and analysis of their viability
- Project management
- Adaptation of Machine Learning technical expertise to each project/use case

- The development of applications for the exploitation of algorithms and their continuous integration

Machine Learning Consultancy and Application Development:

Applus IDIADA's offers a service of expert **consultancy** and **application development** can be adapted to the characteristics of the project and the level of maturity:

Use case exploration phase

Technical expertise is applied for the **exploration and analysis of existing data**, workshop management for use cases ideation, study of the use cases feasibility, definition of requirements for subsequent phases and development of proof of concepts, including trained Machine Learning algorithms.

Implementation phase

Development of exploitable solutions with **refined Machine Learning algorithms**, integration with operational processes, deployment in productive environments.

Maintenance phase

Continuous improvement through retraining of Machine Learning algorithms and **monitoring of algorithm performance**.

In summary, due to the mix of technical skills and expertise, IDIADA works on dedicated projects at all stages and manages a wide variety of aspects, including technical and non-technical business needs.