



Project assignment, Autumn 2025

Project goal is to analyze and create a suitable machine learning model solution based on data provided by Marjetas.

Goal of the project is also to find ways to manage, analyze, visualize and forecast close time events on rains behavior in local climates or classify trends / outliers from local climates. This project wants to encourage students to find new ways to innovate with real world data. Your team should apply appropriate deep learning and classic machine learning algorithms to solve out the problem.

About data

Students of Lapland UAS get sensor data that has been collected since January 2020 (starting point can vary) to 18.09.2025. There will be 2 different kinds of sensors in this project. All data will be delivered in .csv format.

WS100 sensor data represents rain data in liquid form (includes snow) in mm. Includes manufacturers manual. (5 sensors)

LHT sensors data represents humidity and temperature (7 sensors). All the sensors are provided with coordinates, and they all are in Jyväskylä area.

How to report your results

- Explain and visualize the phenomena presented by data. Explain also possible hidden connections in the data.
- Explain the data analytics process including used algorithms
- Show the main results found from the analytics: visualize the process using charts or showing the data, you can also use advanced data analytics tools to help you visualize results

The project outcomes will be presented in project exhibition 3 December 2025. In addition to the final product, the project groups prepare a video presentation in which the relevant findings, own know-how, website content, graphs, etc. are presented to the expert audience. Video duration max 2 minutes.

