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# MEWS - an IoT and Cloud-Based avalanche detection and prediction platform

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In this article we propose a Cloud-based platform for the detection and prediction of snow avalanches. The platform is based on data gathering from sensors, data collection in Cloud and using this data as an input for the developed Machine Learning algorithms. We discuss the different phases of the data workflow and present the proposed system's functionalities. We also analyze the data validation and pre-processing operations necessary before applying the Machine Learning algorithms on the gathered data. We also present the integration of the Machine Learning capabilities with the OpenGate cloud platform.

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