

## Berlin Basement Flooding Alert System

**Relevant training course:** MLOps

**Level of difficulty:** 8/10

### Description of the project:

*The objective of this project is to build a system that analyzes weather and groundwater time series in Berlin to flag potential basement flooding risks. Users receive alerts to take preemptive action (e.g. remove valuables or equipment from basements).*

*The first dataset provides daily precipitation levels on a 1km grid. Hourly precipitation levels at 5 weather stations in Berlin are also available. The second dataset provides daily groundwater measurements at 892 stations in Berlin.*

*Specific aspects of the project:*

- continuous ingestion of new data via APIs
- creating a model to predict from time series data for multiple user locations
- deploying a deep learning model in production

### Resources to refer to:

- **Data:**
  - [DWD Precipitation Data](#)
  - [Berlin Groundwater Measurements](#)
  - Daily precipitation levels on a 1km grid
  - Hourly precipitation levels at 5 weather stations
  - Groundwater measurements at 892 stations
- **Bibliography:**
  - [Berlin Wasserportal API](#)
  - [DWD Data set description](#)