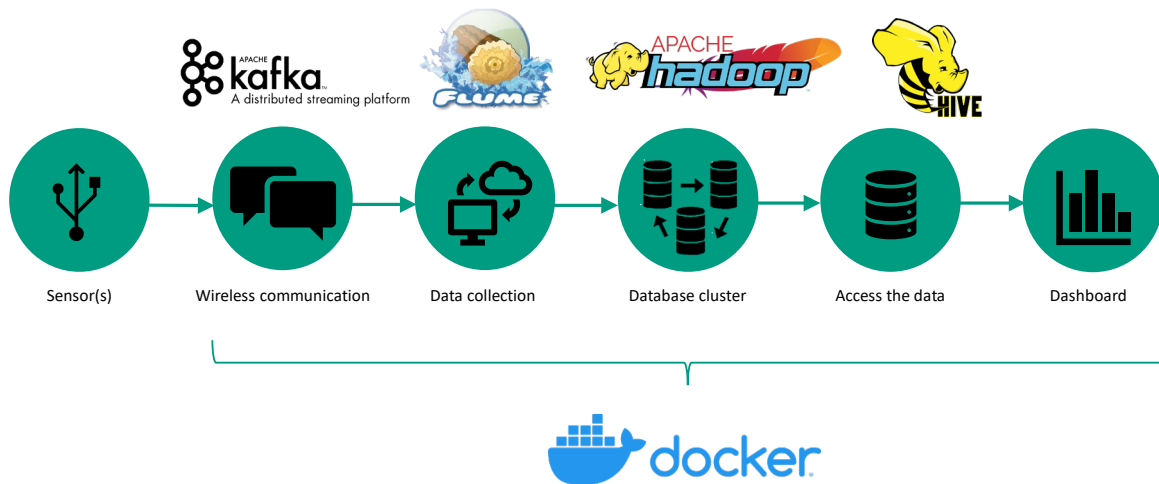


THE AMI DATA MANAGEMENT PLATFORM FOR STORAGE AND ANALYSIS



At Ambient Intelligence, data is central to all our projects. We use sensors to capture, store, preprocess, analyze and visualize it. For example, we measure foot pressure and movement activity using state-of-the-art sensors to detect and prevent health-related issues. For industry, we acquire data on production systems to move towards predictive maintenance. Properly processing acquired data is vital to performing usable analyses. Because of the overlap in our projects, we are working on a standardized approach in the shape of a Data Management Platform (DMP). This is where you come in.

Our DMP design will support data management facilities for multiple projects and it is largely based on open-source software platforms from Apache, like Hadoop and Kafka. We are looking for a network-minded software engineer or software-oriented ITSM student to assist us in designing the overall pipeline, including example implementations. The goal is to have a standard basis that can be modified for specific projects, for example, when different (amounts of) sensors are used, or different requirements are put on data storage and (real-time) visualization.

TASK DESCRIPTION

- Design and implement a standardized DMP solution, using the open-source Apache suite, so that it is stable, robust, scalable, and easily adaptable.
- Validate your solution in at least one of our projects, meeting its specific requirements on factors such as data throughput and hardware limitations.
- Collaborate with researchers at Ambient Intelligence and become part of our team.

PRACTICAL INFORMATION

- **Student profile:** graduation student HBO-ICT SE or ITSM; computer science students of the University of Twente.
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