Be FAIR to Pedestrian Dynamics Data

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Motivation



Findable: Detailed description by metadata in a searchable environment



Accessible: Easy access to data and saved in a long-term storage



Interoperable: Use of exchangeable formats functioning across different systems



Reusable: Metadata includes process of data creation for easy reproduction of data

- Design of standardized metadata schema
- Definition and unification of trajectory and geometry data based on established data formats
- Enrich datasets of existing open data archive with metadata and uniformed data
- Build up consistent documentation
- Establish community metadata schema and data format



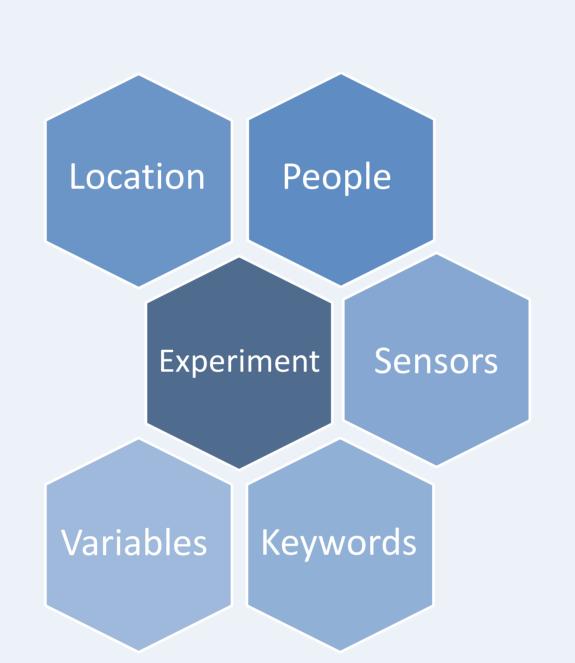
Pedestrian Dynamics Data Archive

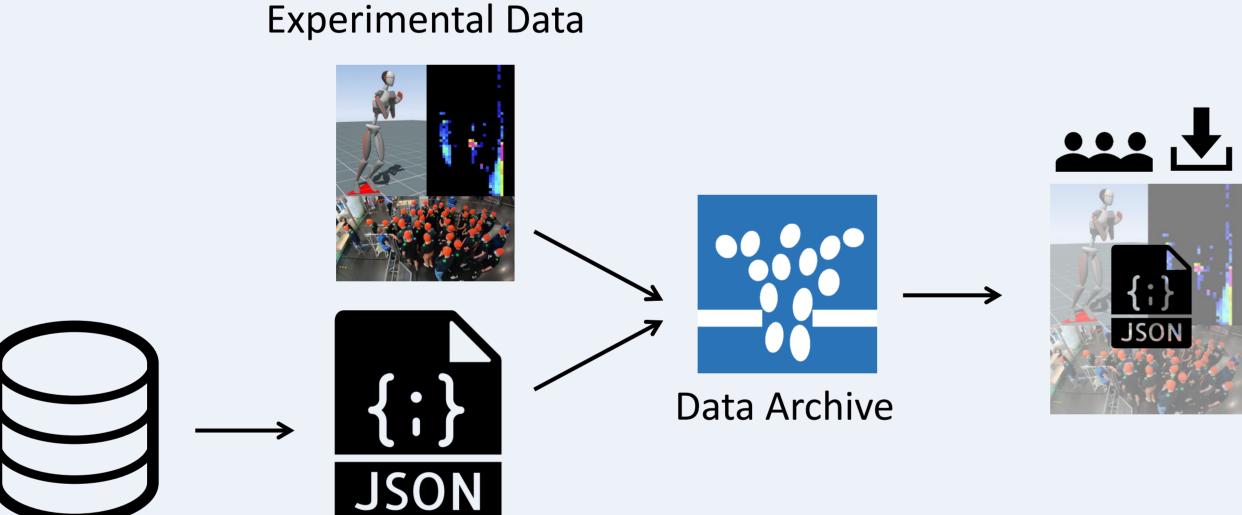
Metadata

- Central database describing all experiments
- Provision by JSON file with essential information

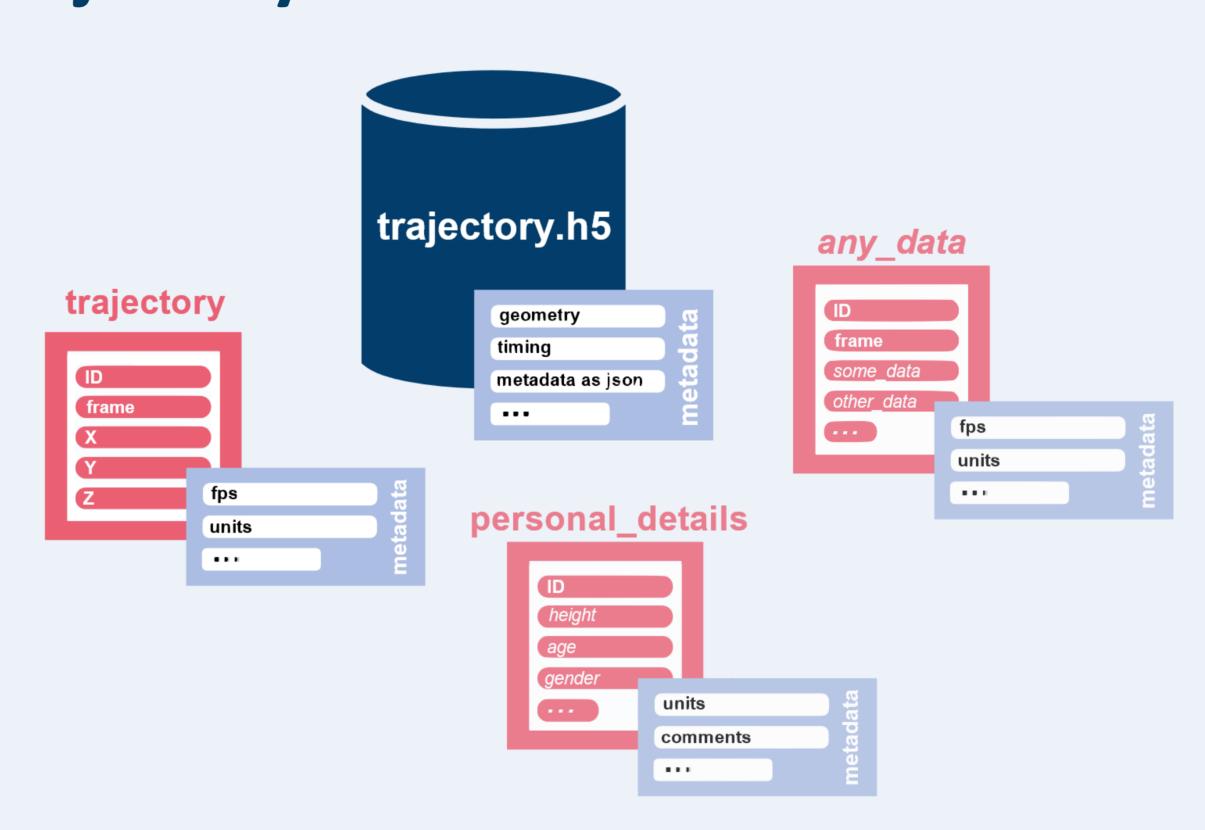
Metadata

 Available alongside experimental data





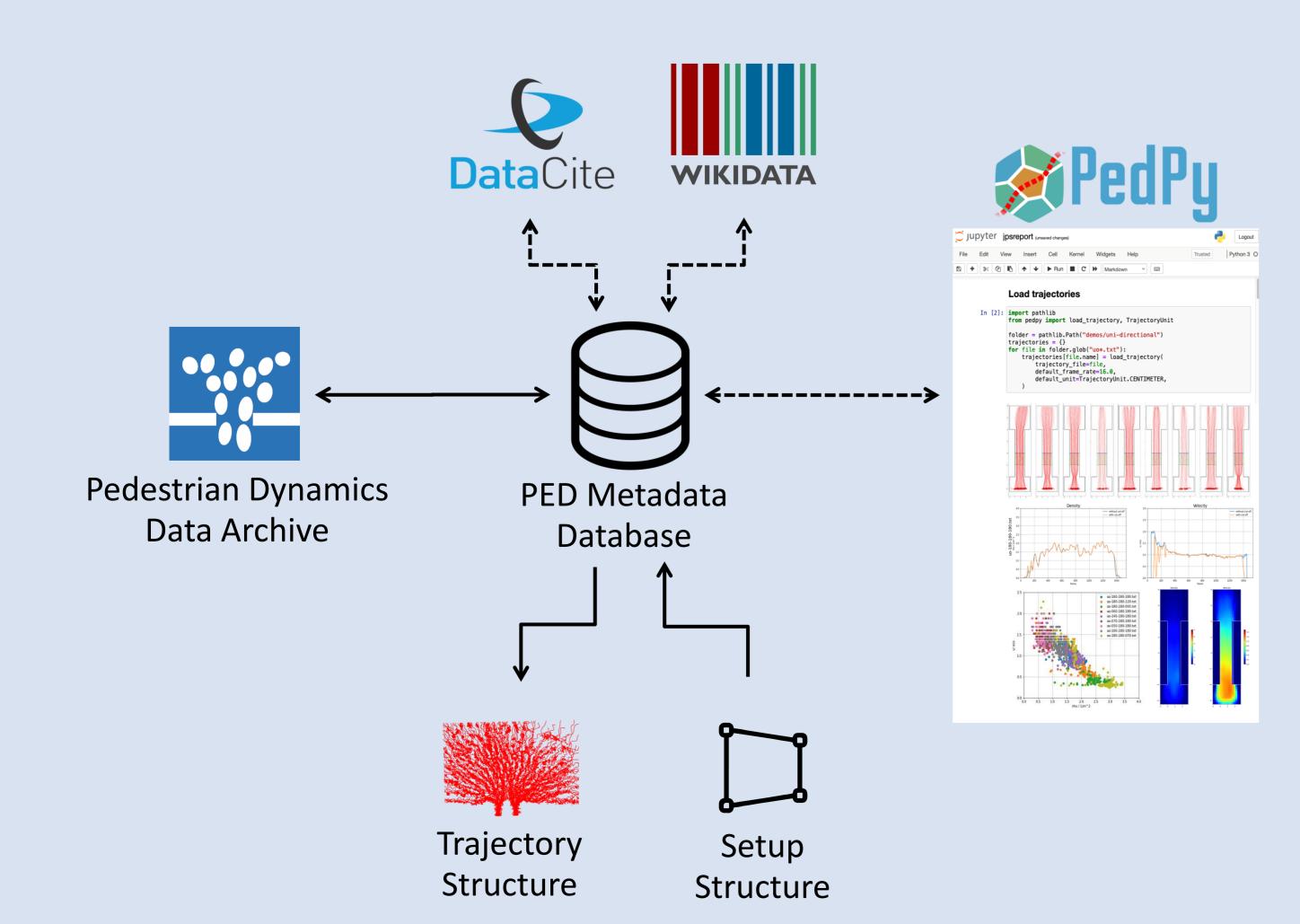
Trajectory Format



- Based on HDF5 as an established data format
- Enriched with related metadata including standardized geometry and timing
- Unification of trajectories within data archive

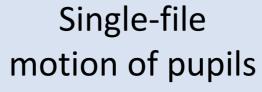
Future Work

Database



- Metadata exchange with repositories like DataCite or WIKIDATA
- Direct access to data via metadata e.g., for analysis
- Keep on reprocessing all of our legacy data
- Reprocessing of hosted external data







of a push