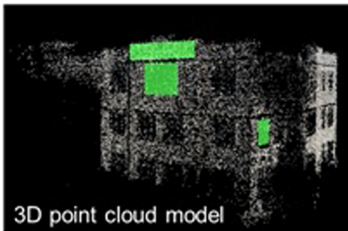


Bootstrapping

- Create a 3D point cloud
- Align it to cyber-information
- Run HD⁴AR server



High-precision Vision-based Augmented Reality

HD⁴AR Client

- 1 User takes a photo
- 2 Upload it to server



- 6 Overlay cyber objects

HD⁴AR Server

- 3 Localize the user

Feature Detection of New Image

Feature Matching against 3D point cloud

Camera Pose Recovery

- 4 Determine objects within user's view
- 5 Send them back to user