

# 3D Building Maps for Everyone - Mapping Buildings Using VGI

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**Abstract** With regard to upcoming or emerging location-based technologies such as indoor positioning and augmented reality, the demand for 3D indoor building models increases. Yet, buildings are often only represented as points or extruded polygons for visualization purposes that are isolated from their surrounding environment. Currently, the whole building modeling workflow is done by modeling experts (“expert2expert”) or specific companies. In order to be independent of specific companies for indoor mapping, we propose VGI as a way to capture building information. Local experts or the “experts of the building”, thus people working or living in a certain building might contribute to this process, although they are not experts in building modeling. Using the tools provided by OSM gives the amateurs the tools at their hand to model what they need and in a simple manner to give them the possibility to provide their “expert knowledge” (“amateur2expert”).

**Keywords** Volunteered geographic information, Smart building, Sensor data, Entrepreneurs