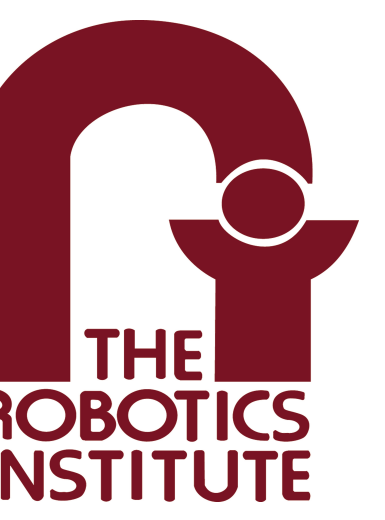
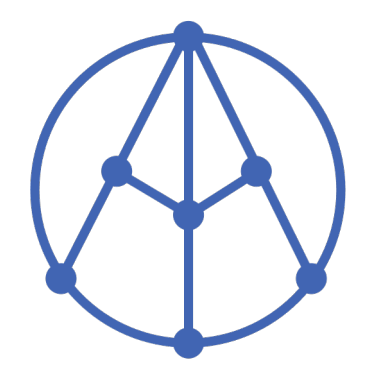


Audio-Visual Floorplan Reconstruction

Senthil Purushwalkam¹, Sebastian Vicenc Amengual Gari², Vamsi Krishna Ithapu², Carl Schissler², Philip Robinson², Abhinav Gupta¹³, Kristen Grauman³⁴

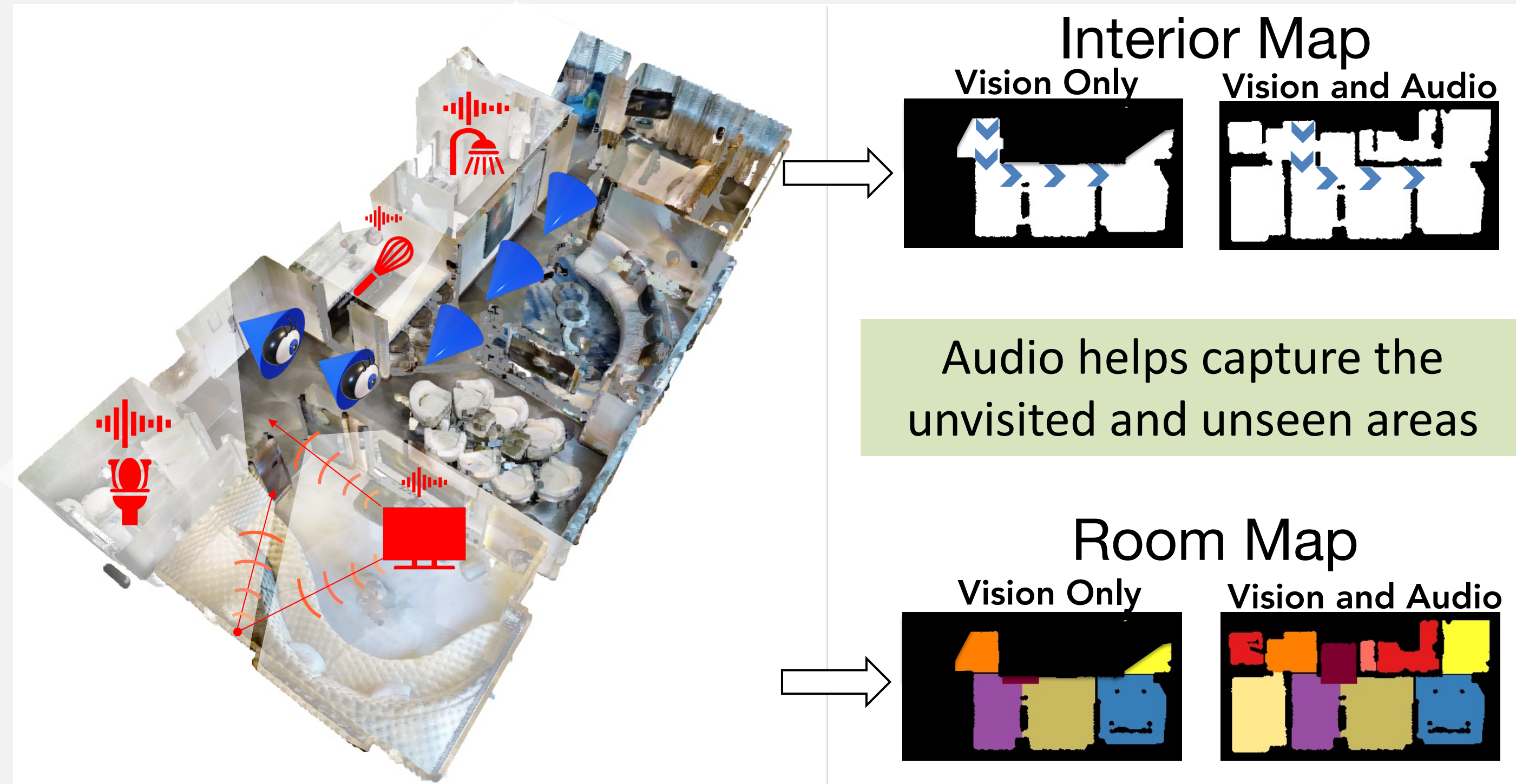
¹Carnegie Mellon University ²Facebook Reality Labs ³Facebook AI Research ⁴University of Texas at Austin

Code: <http://www.cs.cmu.edu/~spurushw/publication/avmap/>

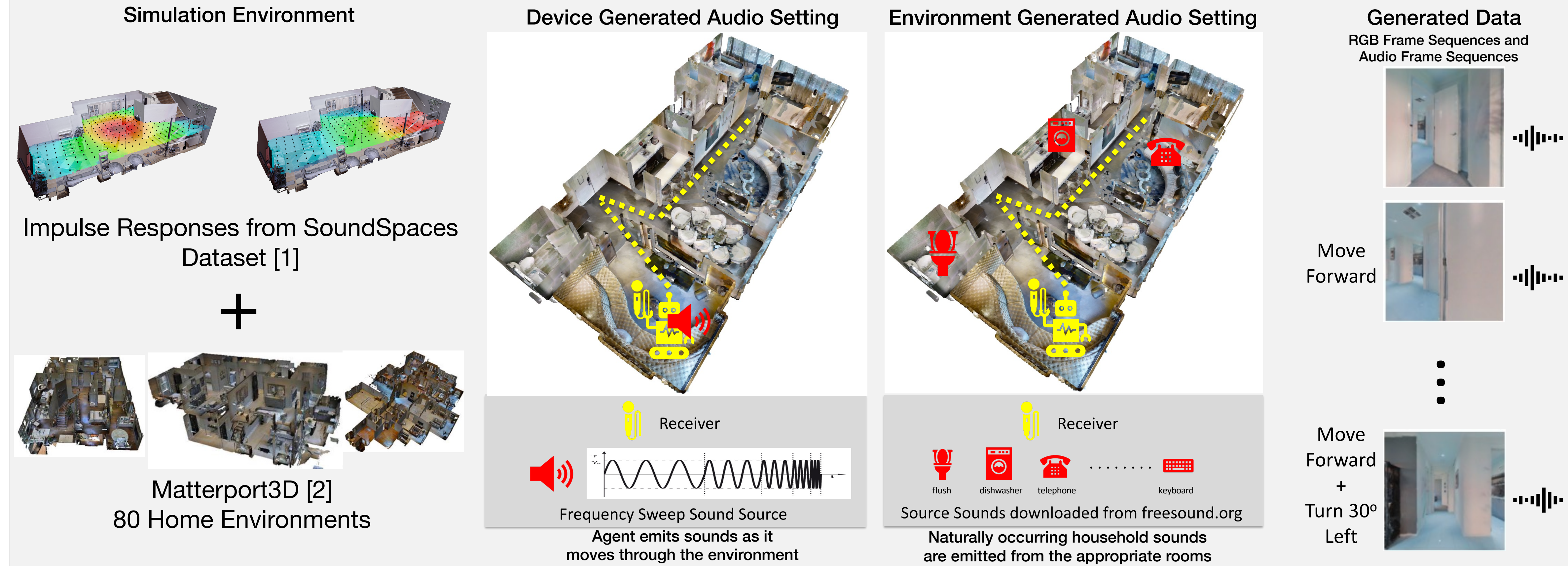


Overview

Goal: given a short video, infer a full floorplan



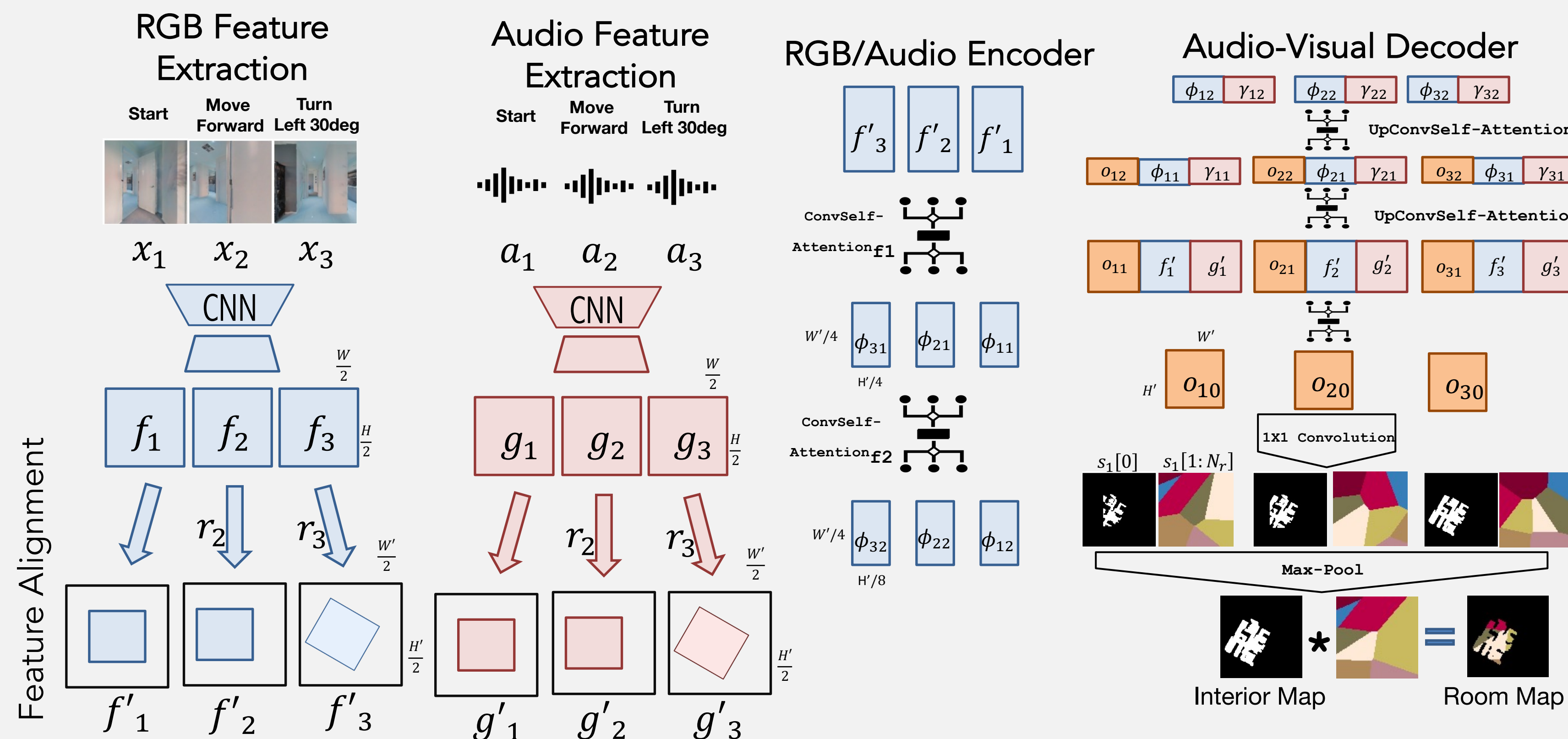
Generating Realistic Audio-Visual Data



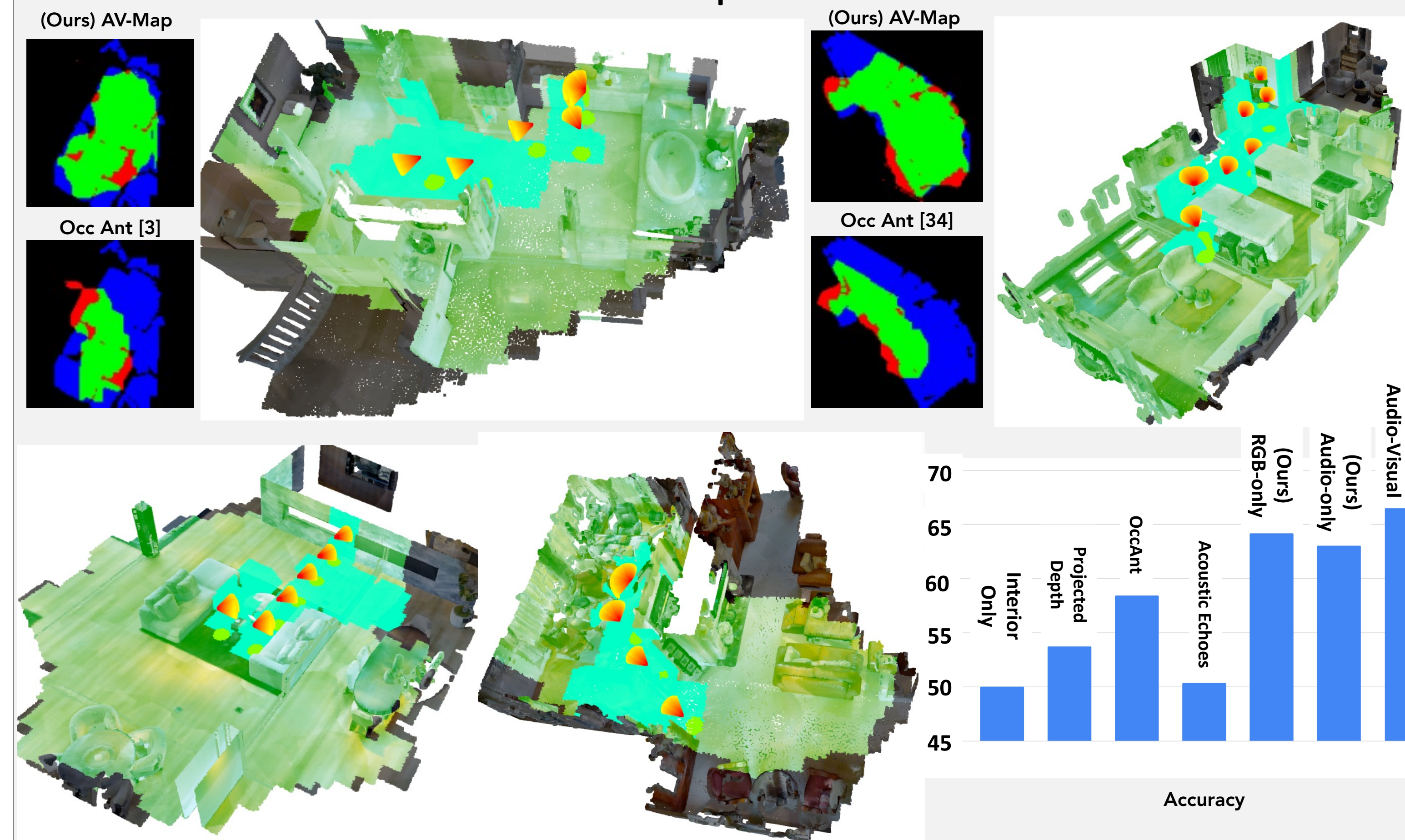
AV-Map Model

Input: RGB+Audio Sequence

Output: 2D Binary Interior Map, N-d Room Map



Interior Map Predictions



Room Map Predictions

