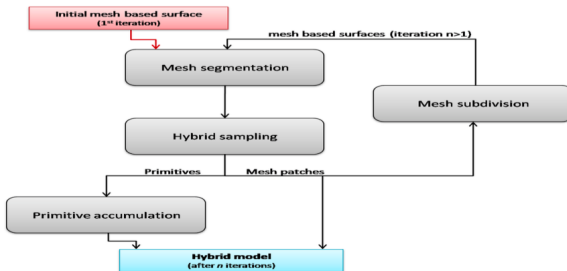


A Hybrid Multi-View Stereo Algorithm for Modeling Urban Scenes

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- ▶ Presents an original multi-view stereo reconstruction algorithm which allows the 3D-modeling of urban scenes as a combination of meshes and geometric primitives
- ▶ Contributions:
 - ▶ Hybrid modeling by generating meshes where primitives are then inserted or by detecting primitives and then meshing the unfitted parts of the scene
 - ▶ The lack of information contained in the images is compensated by the introduction of urban knowledge in the stochastic model
 - ▶ Efficient global optimization by performing the sampling of both 3D-primitives and meshes by a Jump-Diffusion based algorithm
- ▶ Evaluates on Entry-P10, Herz-Jesu-P25 and Church datasets