

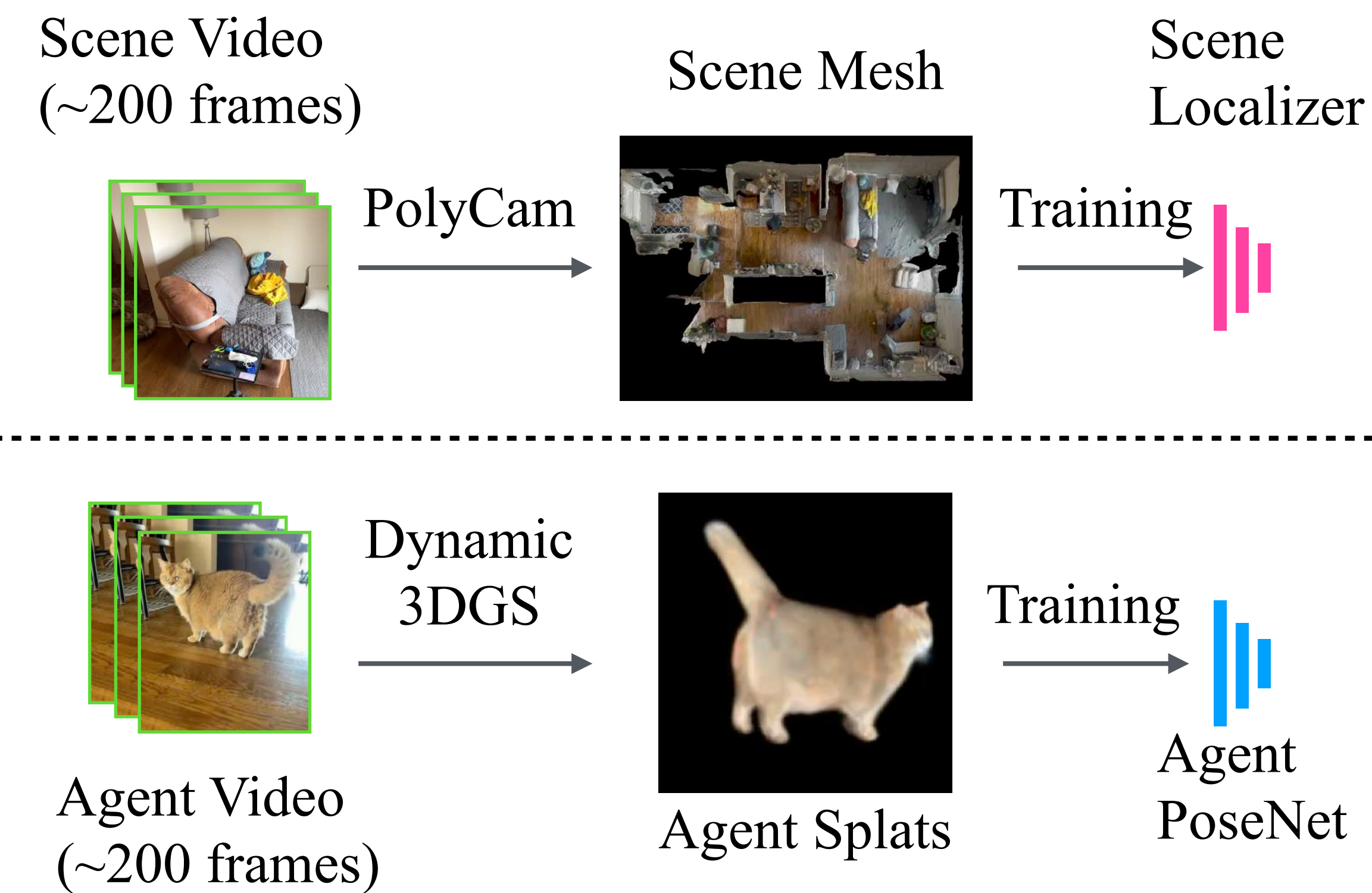
Agent-to-Sim: Learning Interactive Behavior Models from Casual Longitudinal Videos

Gengshan Yang, Andrea Bajcsy, Shunsuke Saito 🍼, Angjoo Kanazawa 🍼

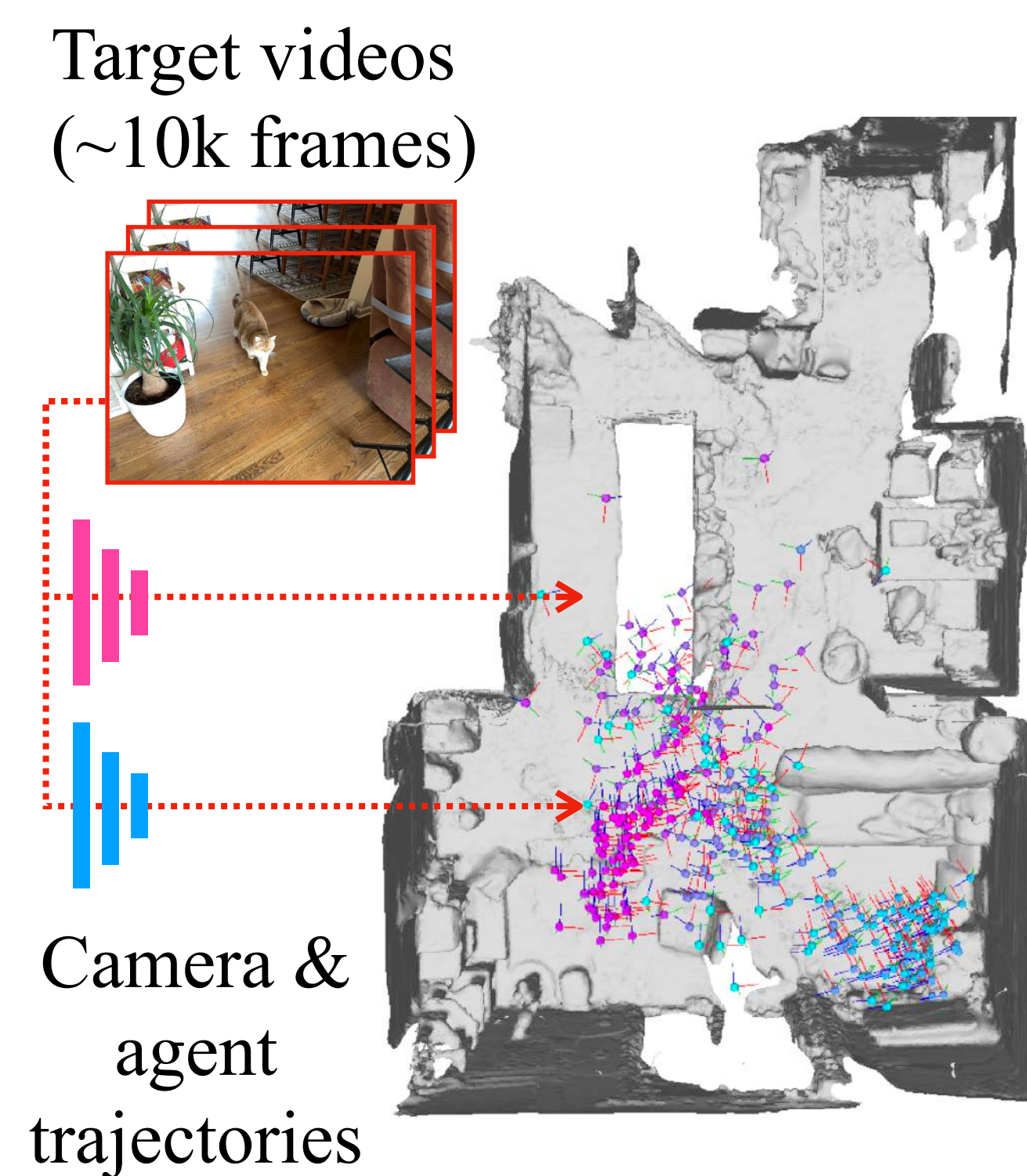
🍼 The last two authors equally mentored this project by both having babies

Multi-Video Dynamic 3D Reconstruction

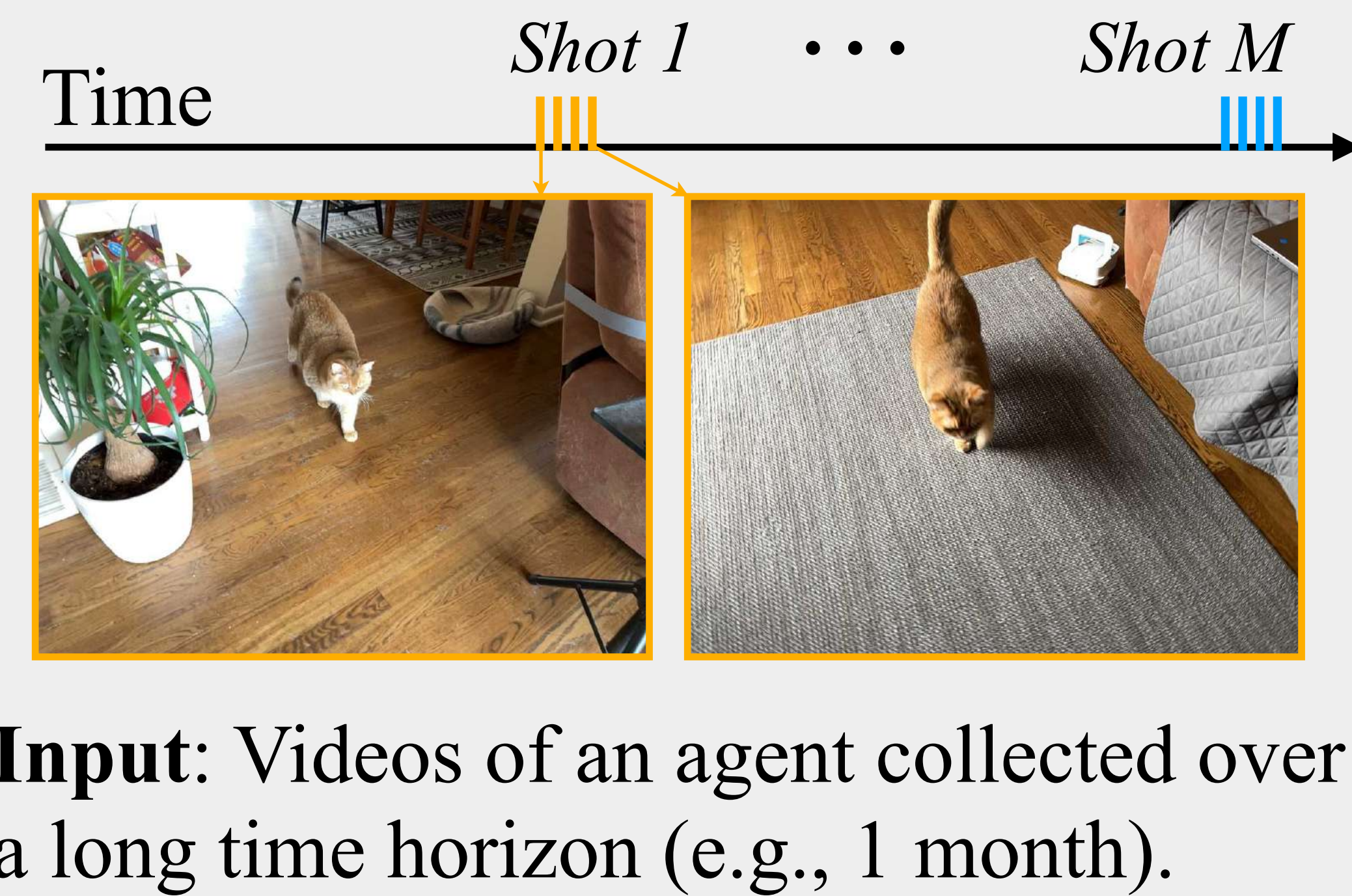
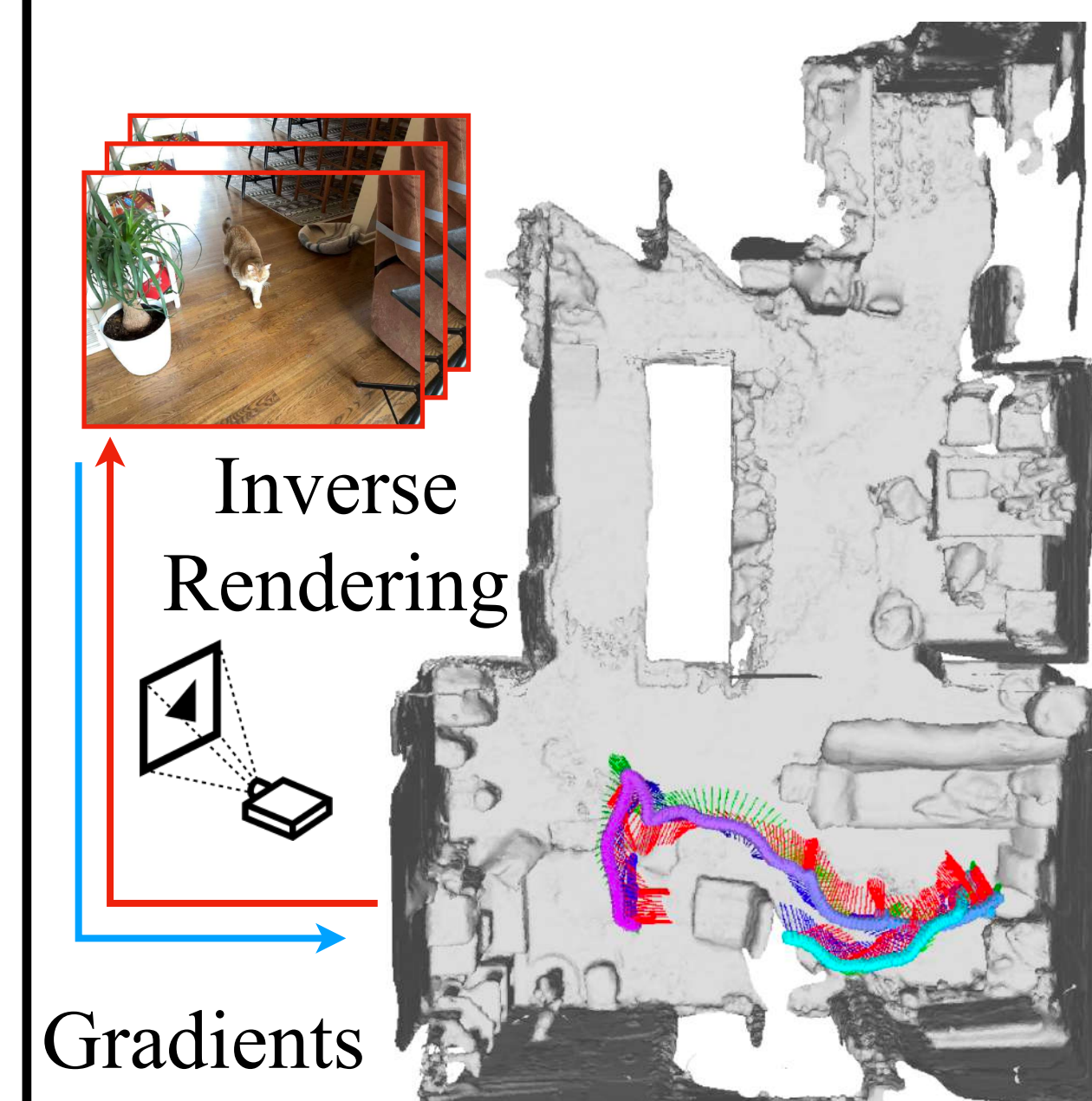
Step 1: Agent/Scene-specific learning with small data



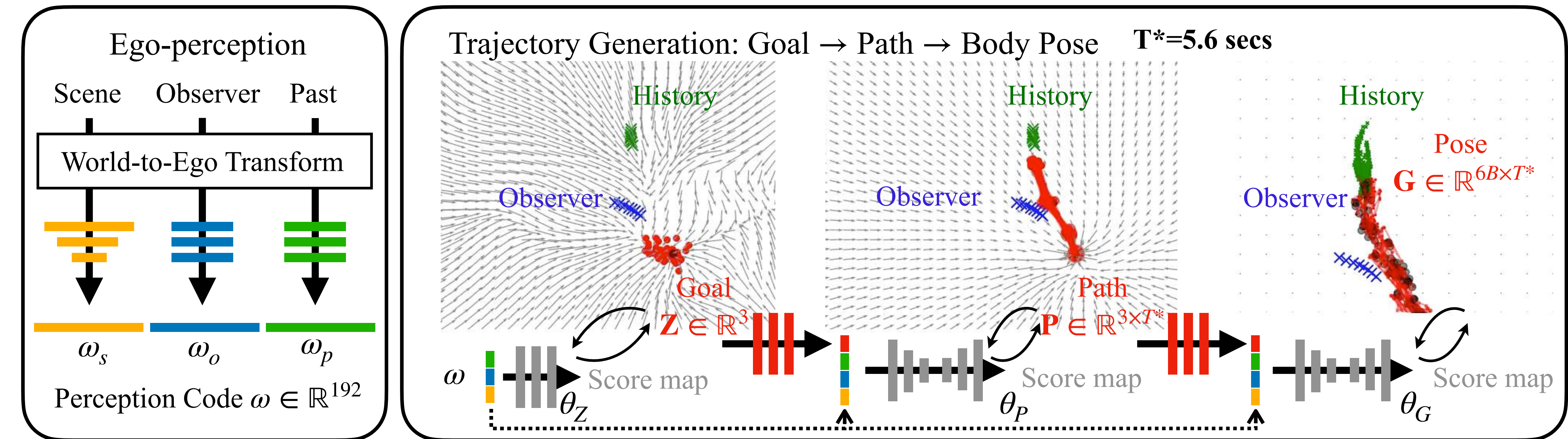
Step 2: Initialization



Step 3: Large-scale Optimization



Interactive Motion Generation



	Videos	Length	Unique Days / Span
Cat	23	25m 39s	9 / 37 days
Human	5	9m 27s	2 / 4 days
Dog	3	7m 13s	1 / 1 day
Bunny	2	1m 48s	1 / 1 day



Scan to know more!



Dynamic 3D Reconstruction



Interactive Agent Simulator