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Sommario/riassunto

This title concerns the use of a particle filter framework to track objects defined in high-dimensional state-spaces using high-dimensional observation spaces. Current tracking applications require us to consider complex models for objects (articulated objects, multiple objects, multiple fragments, etc.) as well as multiple kinds of information (multiple cameras, multiple modalities, etc.). This book presents some recent research that considers the main bottleneck of particle filtering frameworks (high dimensional state spaces) for tracking in such difficult conditions.