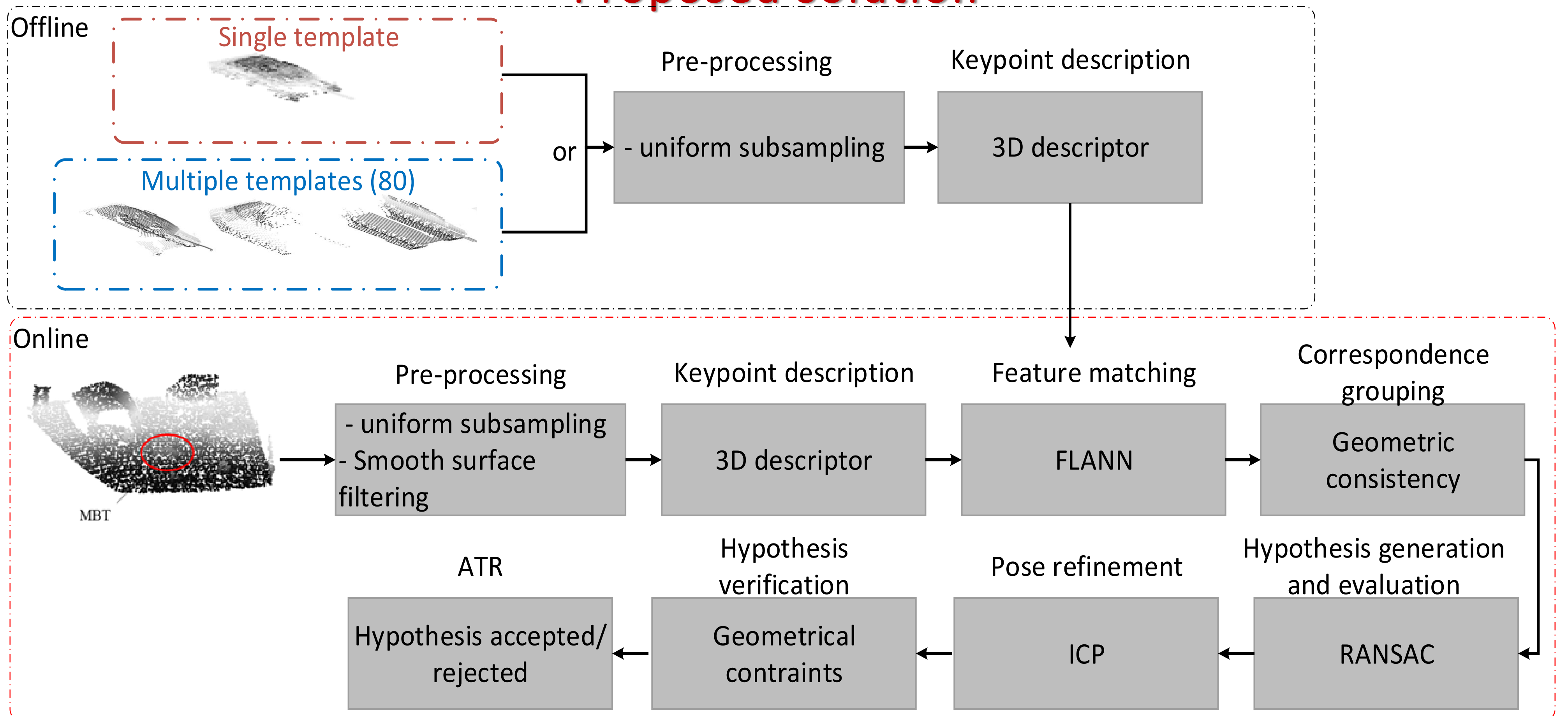# 3D Automatic Target Recognition for UAV Platforms

Highlights
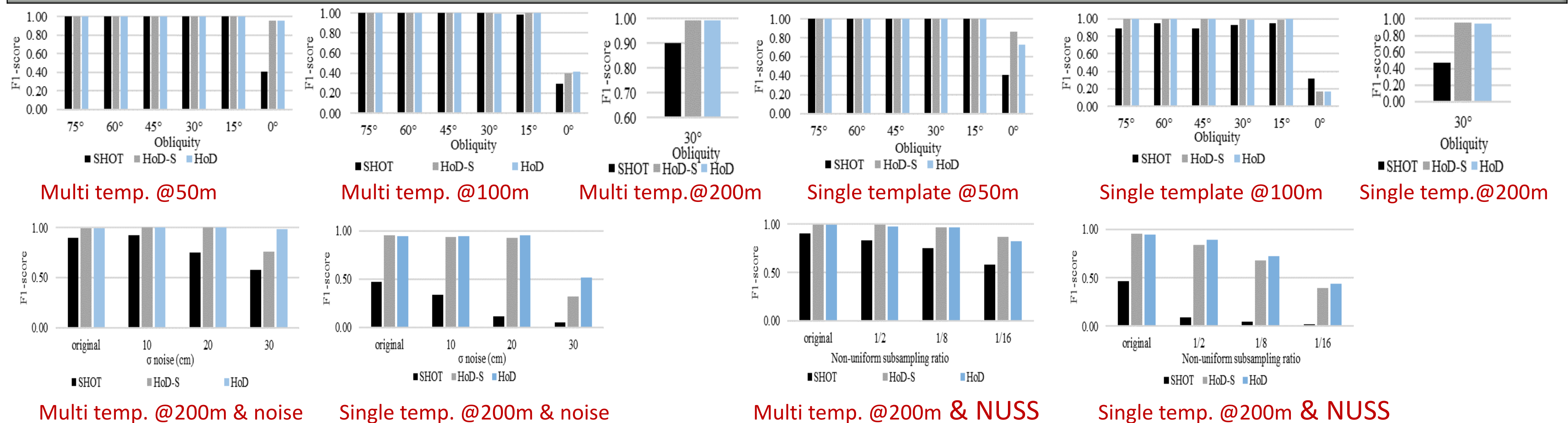
➢ Computer vision techniques in the context of 3D ATR for UAV platforms
➢ Two template size cases; Single and Multi
➢ Simulated but highly credible UAV reconnaissance scenarios with obliquity, range and atmospheric disturbances

Proposed solution

Experiments

➢ Single template vs. Multi template
➢ UAV – target range at 50m – 100m – 200m at 0°-75° obliquity
➢ Noise and non-uniform subsampling (NUSS) simulating atmospheric disturbances

Multi temp. @50m

Multi temp. @100m

Multi temp.@200m

Single template @50m

Single template @100m

Single temp.@200m

Multi temp. @200m & noise

Single temp. @200m & noise

Multi temp. @200m & NUSS

Single temp. @200m & NUSS

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