

Intro To Single-Scan Target Tracking

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Target tracking algorithms play a role in inverse synthetic aperture radar (ISAR) imaging for target acquisition as well as to perform range alignment and estimate changes in the target angle with respect to the array face. This talk goes through the components in generic single-scan target tracking algorithms from filtering to data association, track initiation, and termination. In many areas, reference is made to functions in the open-source copyleft-free Tracker Component Library (available online) so that attendees can rapidly apply the algorithms that are discussed. An extended version of the presentation slides containing additional derivations will be made available.