

## Auteurs

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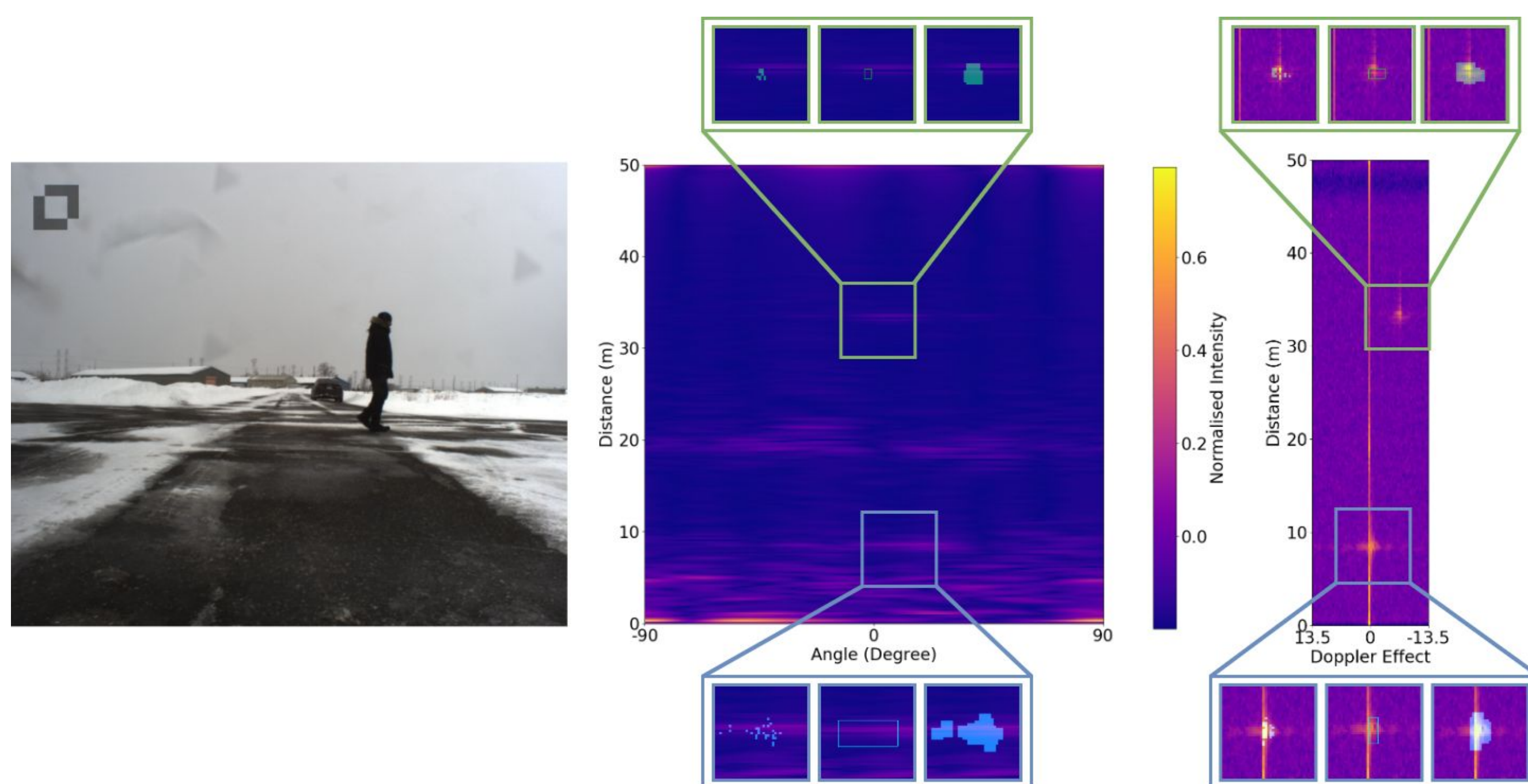
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## Partners



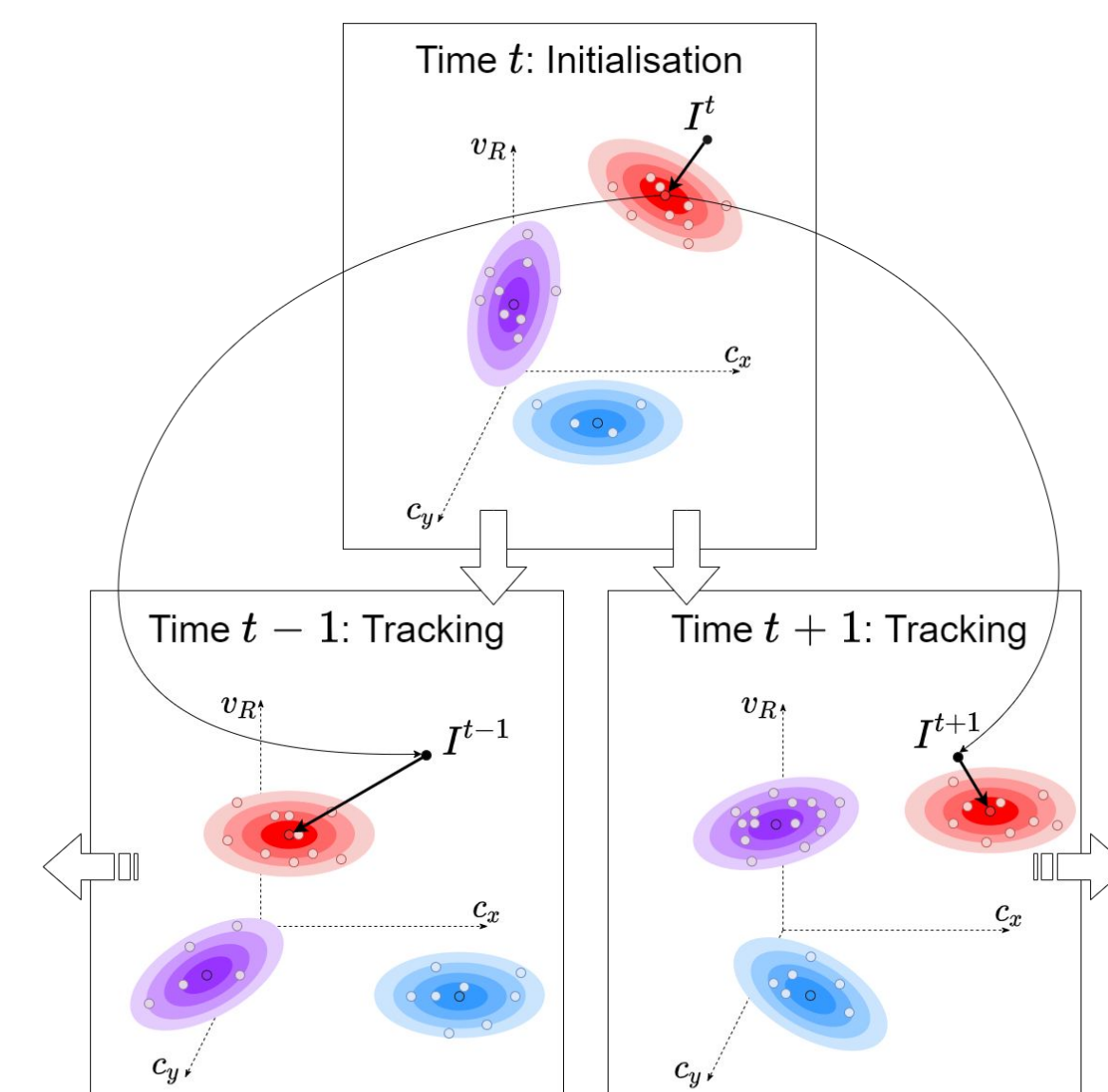
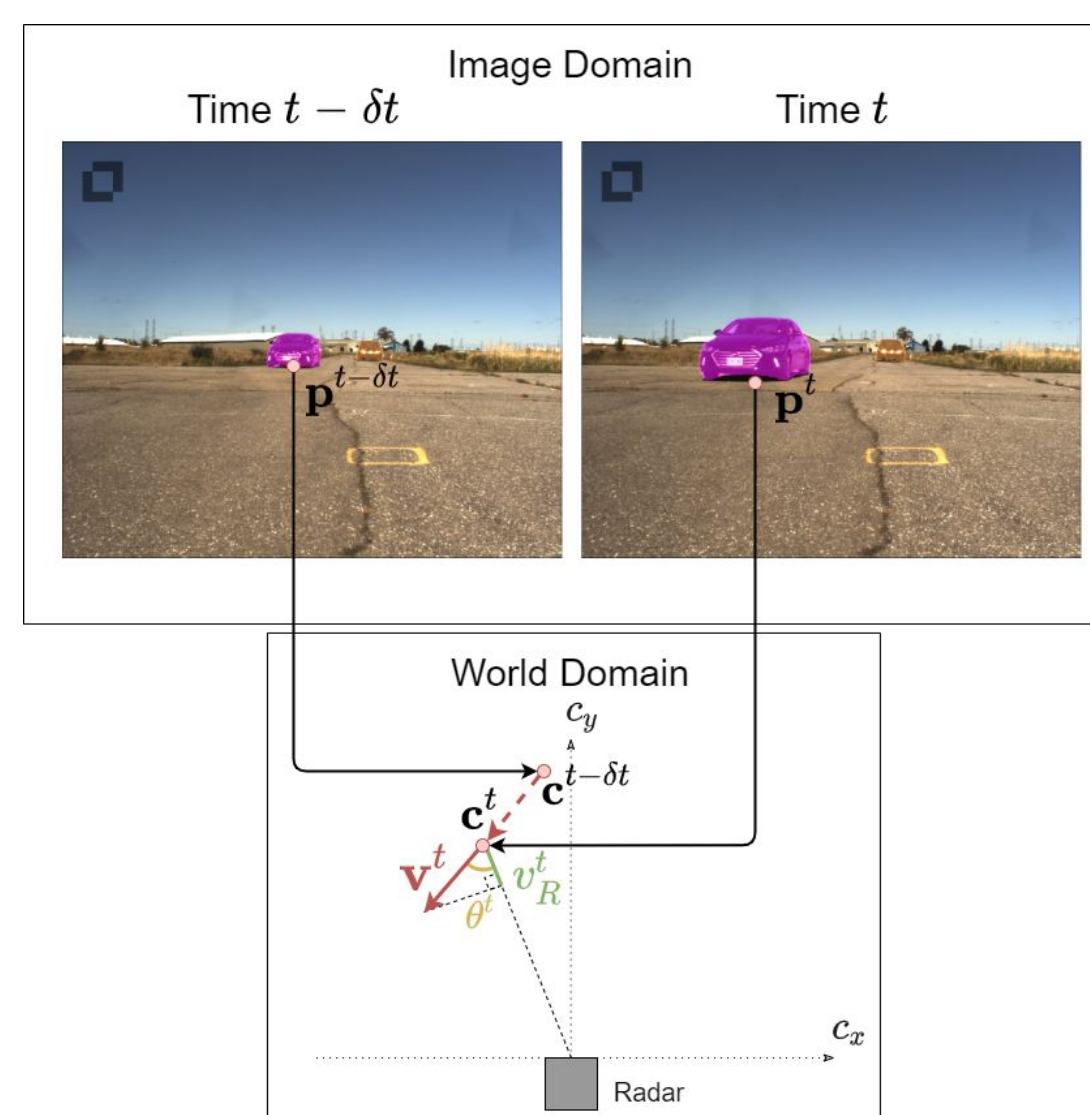
## CONTRIBUTIONS

- **Semi-automatic pipeline** to generate range-angle-Doppler annotations.
- **CARRADA dataset**: synchronized camera and raw radar data with generated annotations.
- Baseline for radar semantic segmentation using Fully Convolutional Networks.



## SEMI-AUTOMATIC ANNOTATION PIPELINE

- **Detect and track** an object in the camera image.
- Compute its **physical properties** (real world coordinates, relative velocity).
- **Project** a feature point from a given object in the DoA<sup>3</sup>-Doppler radar representation.
- **Cluster and track** the object in the DoA<sup>3</sup>-Doppler representation for an entire sequence.
- **Project** the clusters on the raw radar representations to obtain the annotations.



<sup>3</sup> DoA: Direction of Arrival

## CARRADA DATASET

- Synchronized camera and **raw radar data** (range-angle and range-Doppler).
- 30 sequences, +12K frames, +20mins of recording on a test track.
- **One or two objects** per sequence. Categories: pedestrian, cyclist and car.
- **Resolution**: camera = 1238x1028, range-Doppler = 256x64, range-angle = 256x256.
- **Baseline** for radar semantic segmentation
- **Code and data are online.**

