

## References

- [7485215] Igal Bilik, Oded Bialer, Shahar Villeval, Hasan Sharifi, Keerti Kona, Marcus Pan, Dave Persechini, Marcel Musni, and Kevin Geary. Automotive mimo radar for urban environments. In *2016 IEEE Radar Conference (RadarConf)*, pages 1–6, 2016.

**Abstract:** abstract

- [AuthorPaperNum] Authors. Paper name. *Journal Name*, volume(page number):page start – page end, month year.

**Abstract:** abstract

- [bilik2019rise] Igal Bilik, Oren Longman, Shahar Villeval, and Joseph Tabrikian. The rise of radar for autonomous vehicles: Signal processing solutions and future research directions. *IEEE signal processing Magazine*, 36(5):20–31, 2019.

**Abstract:** Survey; radar for autonomous vehicles transforms from detection to imaging (range-doppler-azimuth-elevation). operate in variety of target size and scenes, large DR with multipath and resolution (affected by angle-dependent clutter). MIMO enables large FOV with angular resolution for DOA estimation, noise suppression in 4d by 4d fft and filtering and clustering. Cognitive radar; adaptive feedback between transmitter and reciever (based on previous observations in all 4d domains). MIMO low angular resolution due to antenna aperture is solved by super resolution. Targets are multiple detections - need of clustering the pointcloud, ML is a good candidate.

- [fracastoro2020deep] Giulia Fracastoro, Enrico Magli, Giovanni Poggi, Giuseppe Scarpa, Diego Valsesia, and Luisa Verdoliva. Deep learning methods for synthetic aperture radar image despeckling: An overview of trends and perspectives. *arXiv preprint arXiv:2012.05508*, 2020.

**Abstract:** Survey; deep learning SAR radar. Why ml is a promising method in SAR radar signal processing; present the problem of despeckling in images and why SUPERVISED MODELS are good candidates, provide model comparison from different papers with code and data URL.

- [mason2017deep] Eric Mason, Bariscan Yonel, and Birsen Yazici. Deep learning for radar. In *2017 IEEE Radar Conference (RadarConf)*, pages 1703–1708. IEEE, 2017.

**Abstract:** Survey;