



COMPACT RADARS EXPANSIVE VISION





Who are we?

NUsense is dedicated to the design and development of cutting-edge technologies for a variety of radar applications. Through our engineering expertise and commitment to innovation, we aim to transform the way millimeter radar is used, offering precise, reliable solutions tailored to our customers' needs.

Our expertise spans the full spectrum of radar system development, including the design of antennas, PCBs, and radomes, application-specific modulation techniques, advanced detection algorithms, and embedded software development. With a strong track record in automotive radar industry, our team brings deep technical knowledge and practical experience to every solution we build. We are driven by innovation and committed to delivering high-performance, reliable systems that meet the most demanding standards of quality, safety, and efficiency.



Radar development for various applications



Consulting



Industrialization



Prototyping

- ◆ Our radars unlock real-time 4D sensing in all conditions – darkness, fog, rain.
- ◆ They are private-by-design (no camera data), low-power, and ready for AI processing at the edge.
- ◆ We enable perception for autonomous navigation, smart infrastructure, health monitoring, and more.
- ◆ From mobile robots to UAVs and smart cities – NUsense delivers reliable data where other sensors struggle.



NUsense



**60GHz Compact
77GHz Standard
Imaging Radar 77GHz**



**Smart, compact, low
power consumption**

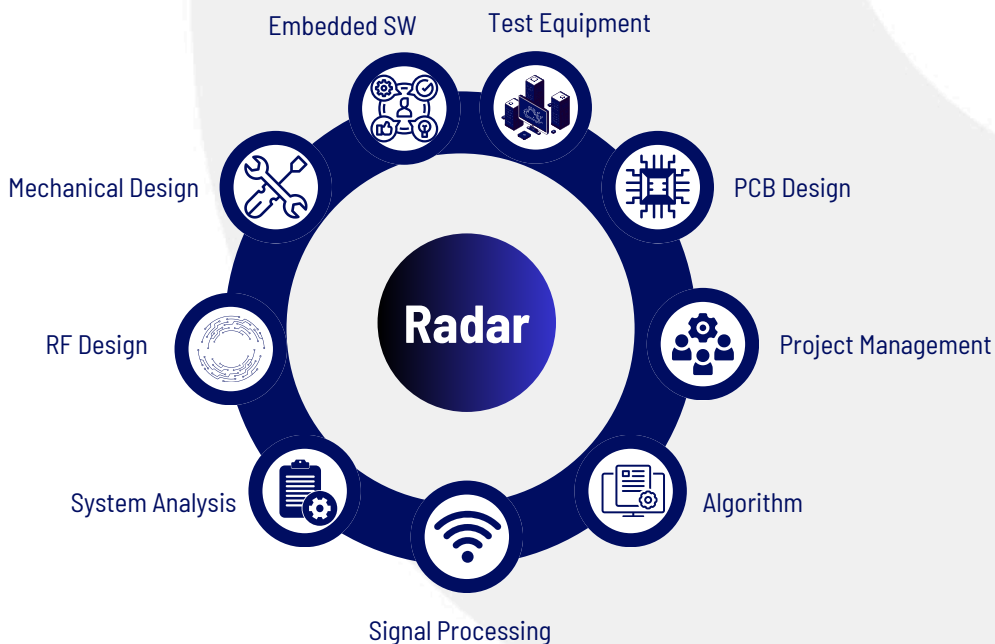
Our Solutions

Radar Solutions

- mmWave Radar Sensor Solutions
- Short-Range Radar Sensor
- Automotive Gesture Sensors
- Human Presence Detection
- Industrial Safety Radar
- Automotive Radar Development and Testing
- Radar Characterization
- High Resolution Radar

Services

- Product Engineering Services
- Embedded Software, hardware and testing
- Antenna Design and 3D Electromagnetic Simulations
- Mechanical Engineering
- Power Electronics
- Design Antenna, PCB, radome
- Optimized modulation for the intended application
- Development of detection algorithms
- Embedded code





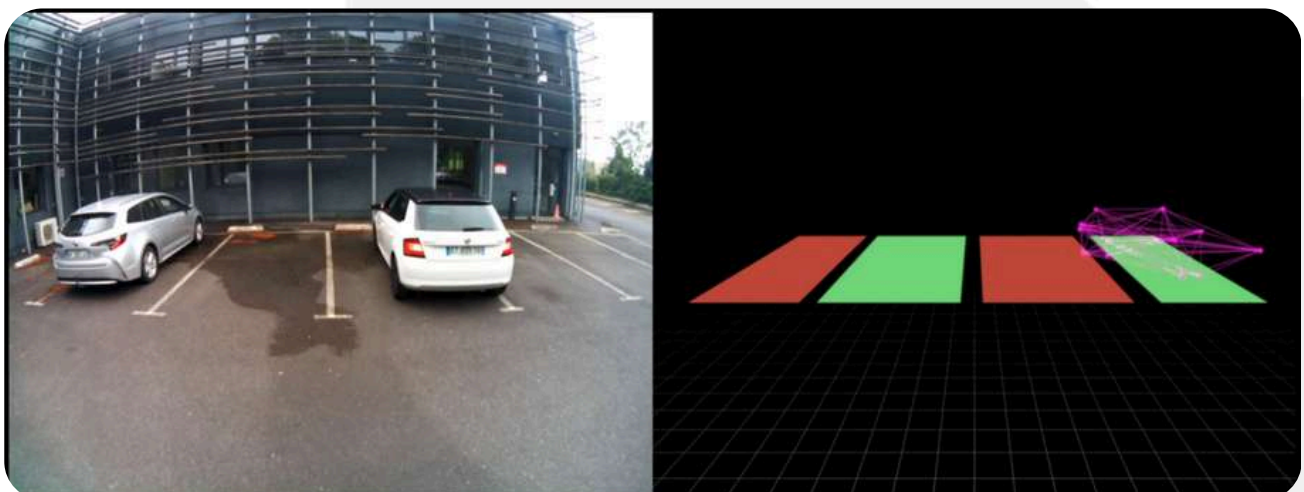
Smarter Mobility with Radar-Driven Perception

Applications:

- Advanced Driver Assistance Systems (ADAS)
- Autonomous shuttles, forklifts, and delivery robots
- Collision detection and avoidance in warehouses
- Precise indoor/outdoor navigation in GPS-denied areas

NUsense Advantages:

- Accurate short- to full-range sensing (up to 500 m)
- High refresh rate and low latency
- 360° situational awareness with multiple sensor nodes
- Resistant to visual obstructions (dust, glare, night)





Reliable Radar Sensing for Challenging Missions- Drones and Defense

Applications:

- UAV terrain following & low-altitude flight
- Altimeter function for drones & mini aircraft
- Collision avoidance in contested environments
- Surveillance and object detection without optical signature

NUsense Advantages:

- Ultra-lightweight sensors ideal for airborne platforms
- Works in GNSS-denied, low-visibility, and jammed conditions
- Silent, passive sensing – immune to visual spoofing
- AI-ready output stream for onboard navigation and autonomy





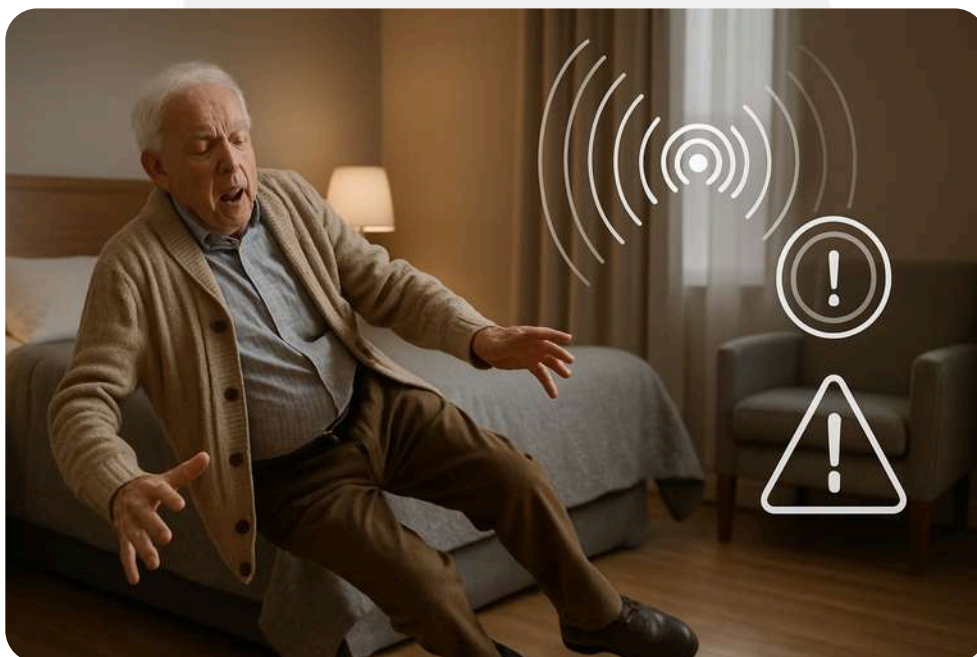
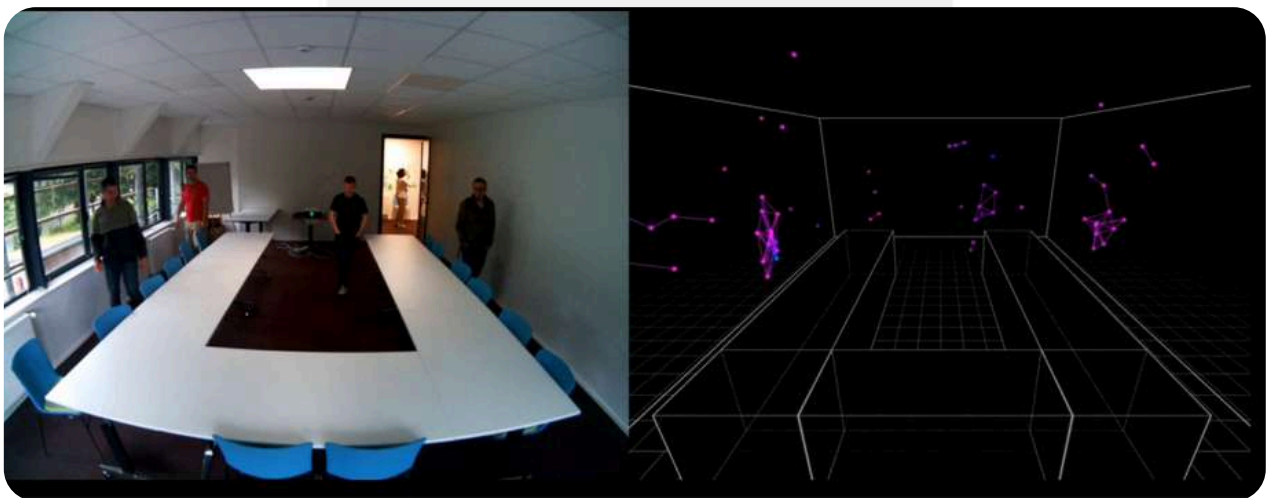
Non-Intrusive Monitoring for Safer Living- Health

Applications:

- Fall detection in senior homes and hospitals
- Sleep and respiration monitoring without wearables
- Activity tracking for assisted living
- Privacy-preserving patient monitoring in shared rooms

NUsense Advantages:

- Works through blankets, curtains, or low-light
- No video or audio recording – 100% private
- Detects micro-movements: chest rise, stillness, irregular activity
- Seamless integration into smart home or hospital systems





Enhancing Urban Intelligence with Discreet Radar

Applications:

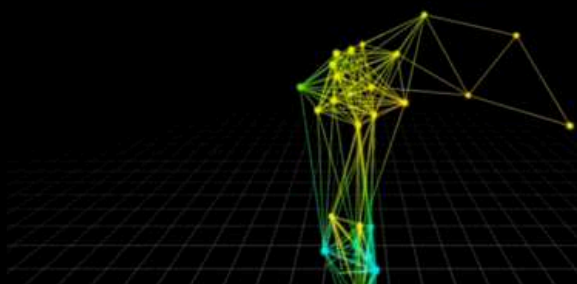
- People counting in stations, malls, offices
- Smart lighting systems based on real movement
- Intrusion detection in restricted areas or perimeters
- Traffic and multimodal mobility flow analysis

NUsense Advantages:

- Works in total darkness, fog, rain – no degradation
- Cannot be fooled or obscured like cameras
- Compact form factor fits inside poles, ceilings, or facades
- No personal data capture – fully GDPR compliant



All conditions localization





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