Radar Human Presence Detector
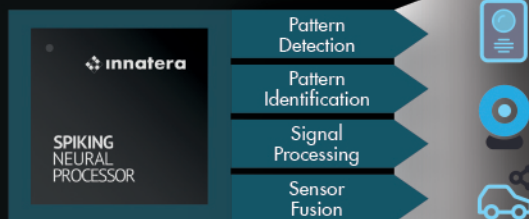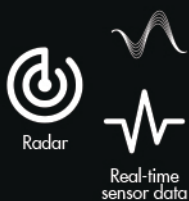
Robust human presence sensing with 60 GHz Radars

The detection of human presence is crucial for various indoor and outdoor applications:

- **Security & Surveillance:** Detect human presence before activating cameras, reducing power consumption and improving response times.
- **Smart Environments:** Optimize lighting and HVAC by activating only when people are present, enhancing energy efficiency.
- **Fall Detection:** Continuously monitor for sudden falls while preserving user privacy, enabling rapid response in healthcare and elderly care settings without the need for intrusive cameras.
- **In-Car Cabin Monitoring:** Identify passengers and ensure child safety with intelligent presence sensing.

Innatera's Spiking Neural Processor enables always-on, high-accuracy human presence detection with exceptional speed, power efficiency, and privacy protection. By processing radar data at the edge, it recognizes human spatio-temporal signatures in real time, distinguishing people from non-human motion like moving bushes or fans, filtering out pets, and maintaining detection even when individuals remain still—such as a seated TV viewer.

KPI	Innatera
Accuracy	~97%
Power	0,6 mW
Inference latency	<10 ms