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Radar Algorithm Engineer & FAE | Automotive Sensors | System Integration | Customer-Facing Technical Expert

Professional Summary

T-shaped Radar Algorithm Engineer & FAE with 10+ years of experience combining deep expertise in FMCW radar signal processing, MIMO/DOA algorithms, and DSP systems with broad capabilities in customer integration, SoC debugging, technical workshops, and cross-functional coordination. Skilled at translating complex radar issues into clear engineering actions and supporting Tier-1/Tier-2 customers through complete radar system deployment. Experienced in driving customer success, delivering workshops, technical onboarding, and bridging requirements between engineering teams and clients.

Core Competencies

- **Field Application Engineering (FAE):** Automotive radar & sensors, technical onboarding, pre/post-sales support
- **Radar SoC and MCU Integration:** CMOS/mmWave SoCs, ADAS ECU deployment, system debugging
- **Radar Algorithms & DSP:** FMCW, MIMO, CFAR, Doppler processing, clutter suppression, beamforming
- **System Architecture:** Radar processing chain, dataflow design, multi-core optimization
- **Programming & Tools:** MATLAB, Embedded C, C, Python (basic), Trace32, Ai assistance tool/copilot
- **Customer & Cross-Cultural Collaboration:** Workshops, demos, EU & China R&D coordination
- **Documentation & Training:** Solution notes, onboarding material, technical workshops
- **Leadership & Mentoring:** Module ownership, technical decisions, team collaboration

Experience

Calterah GmbH — FAE & Technical Sales (Sept 2024 – Present)

- Debugged full radar pipeline (ADC sampling, calibration, detection, angle estimation)
- Resolved ~90% of customer-reported issues across the radar pipeline
- Cleared 5+ critical blocker issues (OTP programming, Secure Boot feature enablement, FuSa, Ethernet driver)
- Delivered technical workshops /Demos to drive design-in/win and hands-on debugging sessions, improving onboarding efficiency

- Represented Calterah at Electronica 2024 for Technical Marketing, demonstrating Alps SoC to 20+ industry customers
- Acted as voice of the customer to collaborate with China R&D teams to refine feature requirements (Secure Boot, OTP, FuSa (Functional safety), Cybersecurity)

Fusionride GmbH — Senior Radar Signal Processing Engineer (Feb 2022 – Sept 2024)

- Architected complete radar processing chain (1D–4D FFT, MIMO, beamforming) in MATLAB.
- Designed multi-core system architecture with optimized memory/runtime performance.
- Built antenna performance evaluation tools (beam patterns, sidelobes, virtual array checks), reducing analysis time from 1 week to 1 day
- Delivered first 4×4 corner radar prototype within 1 year and contributed to 6×8 front radar design.
- Led technical decisions for algorithms, architecture, and module integration.

Continental Automotive — Technical Specialist Radar (Jul 2018 – Feb 2022)

- Achieved 99.92% functional coverage for Gen5 radar validation.
- Implemented CFAR, elevation MIMO modules, and sidelobe suppression, noise estimation.
- Developed RPD/RSP modules on ARM M4, DSP, and MATLAB with significant runtime/memory improvements. Supported root cause analysis across DSP/M4 modules
- Defined algorithm architecture and supported system-level optimization decisions.

Wavelet Technologies — Project Engineer (Jul 2015 – Jul 2018)

Developed firmware for pulse wind profile radar and participated in full lifecycle development.

Education

- Masters in Embedded Systems & VLSI — Pune University, 2016 — CGPA 8.54/10
- Bachelor of Electronics & Telecommunication — Pune University, 2013 — CGPA 8.43/10

Publications & Achievements

- IEEE Conference Paper: "[Comparative study and implementation ... wind profiler radar](#)", 2017.
- Key Achievement: Pioneered introduction of first 4x4 corner radar product with real-time detections within one year at Fusionride | Received monetary award for developing a tool that significantly accelerated initial RSP bring-up and reduced engineering time

Languages

English, Hindi, Marathi, German (A1)