System Architect/ADAS Product owner/Safety manager

SYNTHÈSE PROFESSIONNELLE

System Architect with 13+ years of experience in automotive systems engineering, specialized in Advanced Driver Assistance Systems (ADAS), radar system design, and sensor fusion. Skilled in system architecture, functional safety (ISO 26262), requirements management, and validation following the V-Model. Proven ability to collaborate with OEMs and Tier-1 suppliers to deliver innovative and compliant solutions for autonomous driving and intelligent mobility.

PROFESSIONNELLE EXPERIENCE

LeddarTech, Remote working, Dec. 2024 – Juillet 2025
IA System Architecture of Low- level Sensor Fusion and perception

- Analyzed OEM requirements for ADAS functions such as obstacle detection, object classification, and trajectory tracking.
- Drafted requirements, integration strategies, and architecture documentation in CodeBeamer.
- Reviewed and refined the annotation policy for traffic signs.
- Applied safety-by-design principles (ISO 26262, SEooC) for real-time perception software.
- Collaborated with software, algorithm, and validation teams to ensure scalable and robust architecture.
- Monitored AI perception module performance via KPIs and confusion matrices, ensuring system reliability, safety, and operational compliance.

OPMobility, April. 2023 - Nov. 2024
4D-Radar System Architect Designer

- Designed the functional system architecture for 4D automotive radar.
- Specified 4D radar requirements by analyzing ADAS feature needs and defining system solutions aligned with market standards (NCAP, GSR2).
- Defined radar interfaces including mechanical, electrical, and ECU
- Collaborated closely with internal stakeholders: system, hardware, and software architects, functional safety leaders, mechanical leads, and external partners.
- Supported functional safety engineers to align system requirements with safety standards.

VALEO, Avril. 2018 - Mars 2023
ADAS System Engineer for Parking and Blind Spot Detection based on ultrasonic sensors

- Participated in the analysis of technical specifications for complex RFQs.
- Acted as Functional Owner for Park Assist, Blind Spot Detection, Automatic Parking, and Diagnostic functions.
- Defined and analyzed customer requirements, ensuring traceability between requirements, test cases, and verification activities.
- Cooperated in software reviews throughout the V- model development process.
- Supported project validation through code reviews, SIL, HIL, vehicle, module, and bench testing.
- Managed customer tickets and specific use cases, ensuring timely resolution.
- Led system topics from project acquisition through to series production.

BERTRANDT, Mars 2017 - Mars 2018
Project Design Leader - Hand Free Parking And Breaking (HFPB And APK)

- Led the functional design of powertrain control systems focusing on torque and braking management.
- Managed and updated ADAS electrical system architecture for thermal and hybrid powertrains.
- Authored and executed system validation protocols for HFPB and APK functions.
- Prepared and conducted MIL/ HIL validations using TPT, dSPACE/ControlDesk, and Micro Auto Box platforms.
- Performed rapid prototyping and data acquisition of compiled models on vehicles with Open CMM.
- Acted as ticket manager, identifying and analyzing technical anomalies related to software validation and design using CANalyser.

COORDONNÉES

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COMPÉTENCES

- System Architecture & Design
- Requirements Management & Specifications
- Functional Safety (ISO 26262, SEooC) & Safety Lifecycle Management
- ADAS Systems & Sensors
- Functional Safety & Standards
- Validation & Testing
- AI & Machine Learning
- Project Management & Coordination
- Problem Analysis & Resolution
- Ability to Translate OEM Needs into Technical Requirements
- Adaptability & Autonomy
- Experience Working in Multinational Teams

PSA & Renault, Avr. 2014 - Fév. 2017
Consultant: Conception and validation of control command law

- Design and validation of real-time control strategies for ADAS functions (ACC, Stop & Go, Lane Keeping, Park Assist) and powertrain systems (PHEV, TH & Hybrid).
- Writing and execution of validation plans for ADAS and automatic transmissions.
- Integration of embedded functions on platforms such as Open CMM, ES910, dSPACE, INTECRIO, INCA.
- Execution of MIL/HIL tests and rapid prototyping for control law validation.
- Analysis and troubleshooting of software anomalies (using CANalyzer).
- Writing calibration methodologies and functional analysis documentation.

EKLOR- PME, Août 2013 - Fév. 2014
Electronics Designer and Automation of Solar systems

- Electronics Designer and Automation of Solar systems.
- Evolution of solar control programs for the thermal installation.
- Design and conception of an application to supervise the thermal installation by GPRS.
- Dimensioning of hydraulic pumps and thermal stations according to the customer needs.
- Implementation and start- up the photovoltaic installation.

VALEO, Sept. 2012 - Fév. 2013
End Of Study Internship

- Development and validation of test benches for automotive starters in a LabVIEW environment.

General Electric Ex (ALSTOM POWER), Fév. 2011 - Août 2011
Internship

- Enhancement and development of an electronic control module SPC160 for monitoring and regulating the positioning of hydraulic servo valves in nuclear turbines.

Formations

Février 2012 | University of Technology Belfort Montbéliard | BELFORT (France)
Electrical engineering and control system Option Embedded System.

Septembre 2010 | Industriel Institute of Casablanca | Casablanca (Maroc)
3 Years of Technical Degree | Automation and Industrial Instrumentation.

Language

English| Fluent   **Français| Native**   **Arabe| Native**

Interests

Culinary food |Scuba Diving |Surfcasting |Hand workers