Ahmed Ragab

ahmed@ragab.de
+4917663122376
Langenhagen, Germany
Married (2 Kids)
German
A, B, BE, C, CE
www.linkedin.com/in/a-rgb
www.ragab.de

Summary

Engineering team leader with 15+ years of experience driving innovation in **ADAS and embedded automotive software** across **Europe, Asia, and North America**.

Proven track record of **accelerating development efficiency by 30%**, achieving **ASPICE process maturity**, and **enhancing product quality** through data-driven, cross-functional leadership.

Leads a **global ADAS algorithm development organization** of over **300+ engineers** (15 direct reports), managing multiple simultaneous projects for **European, American, Asian, and South American OEMs**.

Expert in translating complex technical challenges into structured solutions and scalable development frameworks that deliver measurable business impact.

Combines deep technical expertise across all ASPICE V-Model phases with **strategic foresight and authentic leadership**—empowering teams, optimizing processes, and fostering innovation aligned with company strategy.

Fluent in **German, English, and Arabic** with extensive experience leading **intercultural, multi-site teams** toward high performance and product excellence.

Experience

Team Leader ADAS R&D

ZF Group • Hannover, Germany
04/2024 - Present

- Lead a cross-functional ADAS R&D team of **15 engineers** and support over **70 developers directly** across multiple international projects serving **European, American, Asian, and South American OEMs**.
- Shortened **pre-development and proof-of-concept cycles by ~30%** through standardized rapid prototyping using MicroAutoBox and data-driven validation.
- Drove **ASPICE compliance** across algorithm development streams and supported GSR/NCAP compliance for multiple customer programs.
- Optimized engineering processes, reducing **problem report volume by 20%**, and implemented proactive test strategies and CI/CD pipelines enabling **biweekly software releases**.
- Supported project management in **effort estimation and resource allocation**, coordinating hundreds of FTEs across multiple ADAS algorithm work packages.
- Collaborate cross-functionally with **system engineering, software architecture, perception/fusion suppliers, testing, and FuSa** teams to ensure product quality and technical alignment.
- Coach, mentor, and evaluate direct reports through annual development plans, continuous feedback, and leadership support initiatives.
- Contributed to the **strategic organization and governance** of ADAS development, defining team structures and aligning work products with overall business objectives.

Lead Engineer – ADAS Software Development

ZF Group / WABCO • Hannover, Germany
06/2020 - 03/2024

- Lead a **multidisciplinary team of ~30 engineers** (system, software, test, and architecture) in the development of **longitudinal control ADAS features** including ACC, Distance Warning, Intelligent Speed Assistance, and Highway Assist. Achieved **40% reduction in problem reports** by establishing a lean issue-handling process later adopted by additional teams.
- Drove **ASPICE compliance**, closing critical process gaps and ensuring consistency across V-Model development phases.
- Delivered **6 successful SOPs** for major **American, Dutch, Italian, and Chinese OEM programs**, managing technical alignment from concept to production.
- Introduced a **semi-agile communication process**, streamlining interaction between development and project teams for faster issue resolution.
- Served as **primary technical contact** for OEMs and suppliers, leading weekly status reviews and escalation meetings to maintain program alignment.
- Acted as a **bridge between management, system, software, and test disciplines**, ensuring integration quality and adherence to functional safety standards.
- Mentored junior engineers, fostering knowledge transfer and team cohesion during and after the ZF-WABCO integration.

System Engineer – ADAS & Embedded Software

WABCO • Hannover, Germany
04/2011 - 05/2020

- Developed and rapidly prototyped **radar- and map-based ADAS functions** such as Adaptive Cruise Control (ACC), Autonomous Emergency Braking (AEBS), and Predictive Cruise Control (OptiPace).
- Acted as a technical **bridge between application and BSW layers (AUTOSAR)**, improving system stability and integration efficiency across multiple ADAS features
- Contributed to the delivery of **5 successful SOPs** for major **Dutch and Italian OEM programs**.
- Introduced **rapid prototyping using MicroAutoBox**, accelerating proof-of-concept and early issue detection—later institutionalized as a company standard.
- Played a key role in **OptiPace (Predictive Cruise Control)** development from concept to SOP, covering idea creation, supplier selection, coding, testing, integration, and customer workshops.
- Applied **Model-Based Design (MATLAB/Simulink, Embedded C)** for algorithm implementation and validation under the ASPICE V-Model.
- Executed system-level testing using **HiL and vehicle environments**, ensuring functionality and robustness under real world conditions.
- Collaborated with cross-domain teams to define requirements, optimize control logic, and align with automotive quality and safety standards.

Engineering Consultant / SW Engineer

Comlet & Altran • Germany
01/2009 - 03/2011

- Delivered embedded software and ADAS function development for leading automotive suppliers, including **Bosch, TKP, and WABCO**.
- Contributed to **radar- and camera-based ADAS systems**, supporting full lifecycle activities from requirements and modeling to vehicle integration and validation.
- Contributed to the application of stereo-camera-based ADAS features, supporting the field data collection and test strategies on different vehicle platforms.
- Tested **Embedded C firmware and control algorithms** for steering and powertrain systems, ensuring compliance with automotive safety standards.
- Designed **GPS-based test environments** and **simulation models** in MATLAB/Simulink to enable data-driven feature validation and calibration.
- Collaborated in **international, cross-functional teams** following structured ASPICE V-Model processes, strengthening foundations in process discipline and system thinking.

Fitness Trainer (Part-time)

Freelance • Hannover, Germany
03/2017 - Present

- Lead group and individual training programs (3–30 participants, ages 14–70) focused on functional fitness, safety, and measurable performance improvement.
- Apply **coaching, motivational, and communication techniques** that directly translate to engineering team leadership— building engagement, accountability, and continuous improvement.

- Cultivated strong group dynamics across diverse experience levels, reflecting the ability to guide teams with empathy, structure, and consistency.

Skills

ADAS/AD, Rapid Prototyping (HiL/Vehicle), Algo Development, MbE (MATLAB/Simulink, TargetLink), Embedded-C, Requirements Engineering (DOORS, Windchill), Test Strategy & Automation, Process Optimization & Root Cause Analysis, Cross-Functional Team Leadership, Mentoring & Performance Management, Intercultural Collaboration, Stakeholder Communication, Jira, MicroAutoBox (dSPACE), Vector Tools (CANape, CANalyzer), Project Planning (CPlace), passed CFA Level 1 exam on the first attempt.

Education

Project Management Associate (PMA) - Level D

Hannover Hochschule • Hannover, Germany
01/2020
IPMA - Level D

Comprehensive understanding of project management principles, including scope, time, and cost management.

Mechatronics

Universität Paderborn • Paderborn, Germany
10/2008
Master of Engineering (M.Eng.)
Advanced knowledge of control systems, robotics, and automation technologies applied in complex engineering projects.

Master thesis: *"Test und Modifikation von Fahrdynamik-Simulationsmodellen für die Echtzeitanwendung"* – Commercial vehicle modeling and real-time integration, conducted at **Daimler AG**, Stuttgart, Germany.

Mechatronics

Information Technology Institute • Giza, Egypt
07/2006
Post-graduate Diploma

Comprehensive understanding of integrating mechanical, electronic, and software components to design and develop intelligent automated systems.

Electrical, Electronics & Communication Engineering

Ain Shams University • Cairo, Egypt
08/2005
Bachelor of Science (B.Sc.)
Comprehensive knowledge of analog and digital electronics including microprocessors and embedded systems. Fundamental principles of electromagnetic theory, semiconductor devices, telecommunications, signal processing, and wireless communication systems.

Languages

Arabic (Native)

English (Fluent)

Deutsch (Fluent)

Spanish (Basic)