ANDRÉ SCHAUER

Systems Engineering Expert (M. Sc.)

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PROFESSIONAL SUMMARY

Experienced Systems Engineer with over 10 years of automotive expertise in drivetrain development, model-based systems engineering, ASPICE, requirements and architecture management, and functional safety. Proven track record in process and tool implementation (CARIAD, Schaeffler) and development of scalable modeling and simulation solutions for e-mobility, ADAS/AD, and software-defined vehicles. Strong communicator and team lead passionate about pragmatic, sustainable system development.

PROFESSIONAL EXPERIENCE

Senior PMT Architect Eng. Architecture ADAS/AD
CARIAD SE

📅 2025 – Ongoing   📍 Mönsheim

- Established and rolled out software specification language tooling and methods.
- Developed and automated specification language for end-to-end traceability and audit readiness.

Senior PMT Architect Eng. Environemnt SDV
CARIAD SE

📅 2024 – 2025   📍 Mönsheim

- Established and rolled out model-based systems engineering processes from system to software architecture for software-defined vehicles.
- Developed and automated SysMLv2 toolchains in SysIDE for end-to-end traceability and audit readiness.
- Implemented PMT solutions with ArchE/MPS to optimize engineering workflows.

Senior Systems Engineer ADAS/AD
CARIAD SE

📅 2022 – 2024   📍 Mönsheim

- Introduced and scaled MBSE methods for driver assistance and autonomous driving functions.
- Created profile extensions and metamodels in CAMEO to unify safety and system requirements.
- Integrated functional safety aspects into MBSE models and simulation workflows.

Senior Systems Engineer Process, Method and Tool Development(PMT)
Schaeffler Automotive Bühl GmbH & Co. KG

📅 2019 – 2021   📍 Bühl

MY LIFE PHILOSOPHY

"Pragmatic Systems Engineering is my passion. Perform and enable structured development for sustainable, safe and performing systems."

CERTIFICATION

2021
Systems Engineer Professional CSEP

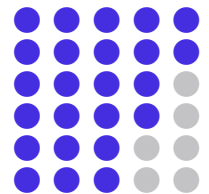**2022**
Functional Safety Professional Red Belt
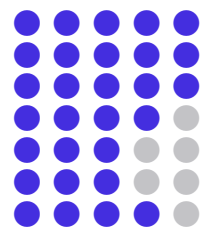
2023
Software Architect Professional CSAP–F

CORE COMPETENCIES

MBSE & Modeling	●●●●●
Requirements & PMT	●●●●●
Toolchains & Automations	●●●●○
ISO 15288, ISO 26262	●●●●○
Simulation & Control	●●●○○
ASPICE & Functional Safety	●●●○○

TOOL SKILLS

SysMLv2/SysIDE	●●●●●
CAMEO Systems Model	●●●●●
ArchE (MPS)	●●●●●
Enterprise Architect	●●●●○
PTC Integrity / AVW	●●●○○
Codebeamer	●●●○○
MS Office	●●●●○

PROGRAMMING

Python	●●●●○
MPS	●●●●○
Java	●●●●○
RUST	●●●●○
C++	●●●○○
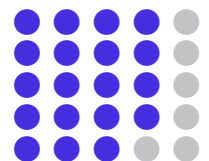
- - Designed and harmonized PMT solutions for e-mobility (ASPICE CL2→3), including model-supported process development, templates, guidelines, and tool integrations.
- Developed project-specific profile language extensions and end-to-end traceability from requirements to test.

System Engineer System Integration, Team Concept Development System and Actuation

Schaeffler Automotive Bühl GmbH & Co. KG

📅 2014 – 2018   📍 Bühl

- - Led system development of modular hydraulic actuators for drivetrain functions (clutch, park lock, cooling).
- Conducted concept simulations and hardware-in-the-loop tests using MATLAB/Simulink and Enterprise Architect.

SELECTED PROJECTS

SDV Product Development
Enabler Model-based Systems Engineering

📅 2024 – Ongoing

Developing methodology, architecture & tooling for product use cases by starting from product requirements, developing the system architecture and elaboration of software, hardware and mechanical component requirements.

Software Gateway Development ADAS/AD
Enabler Vehicle Data Model Specification

📅 2024 – Ongoing

Developing methodology and specification of a vehicle data model for ADAS/AD to specify and generate software interfaces of AOS Gateways

Feature Development ADAS/AD
Enabler Model-based Systems Engineering

📅 2022 – 2023

Developing driving features in the fields of ADAS/AD starting with elaborating stakeholder needs, derivation of system requirements and breakdown to software components.

E-Mobility PMT Harmonization
System Architecture & Design Lead PMT

📅 2019 – 2021

Harmonizing group wide PMT solutions to one common solution for the business unit E-Mobility to achieve a compliance of norms, standards and Automotive SPICE $^®$ CL3.

Advanced Project – Hybrid Drivetrain Actuation Systems
Systems Engineering Lead

📅 2015 – 2019

Development of a modular hydraulic actuation system for actuation of several drive train functionalities like Clutch System, Parking Locks or Cooling.

SOFT SKILLS

Abstraction   Fast perception   Coaching   Fast Learner   Team-Player   Motivator & Leader

LANGUAGES

German   English

EDUCATION

M.Sc.– Diplom
Electronics • Mechatronics
Master's thesis: Energy-based control to actively reduce vibration in flexible multi-body systems

Technical University Kaiserslautern

📅 2008 – 2014

Abitur
Hohenstaufen-Gymnasium Kaiserslautern

📅 1998 – 2007

DRIVERS LICENSE

German Drivers Licence – B
📅 2005

Trained Driver – A
CARIAD
📅 2023

HOBBIES

MTB   Watersports   Hiking