Amar B. Awale

Senior Staff Consultant

Mr. Amar Awale is a Senior Staff Consultant with over 23 years of experience in the automotive industry, including working with one of the Big Three automotive companies and the world's largest Tier-I automotive supplier. He brings insight into Advanced Driver Assistance Systems (ADAS) and vehicle safety systems.

Mr. Awale worked on the development of parking and visualization systems features for SAE Levels 2–3 of autonomous driving and Functional Safety Compliance (ISO 26262). He was responsible for delivering end-to-end feature functionality such as Surround View Camera (SVC) and Base Park Assist (BPA) in compliance with the ASPICE quality process.

Mr. Awale has worked on Human-Machine Interface (HMI) architecture, including Service-Oriented Architecture (SOA) services creation in a Software-Defined Vehicle (SDV) architecture and features modeling with a Model-Based Systems Engineering (MBSE) approach.

Mr. Awale worked on Hardware-in-the-Loop (HIL) simulation testing and validation of ADAS features such as traffic sign recognition, automatic emergency braking, and lane keeping assist. He was responsible for creating virtual simulation bench-top methods to support feature owners with test case creations and validations.

Mr. Awale worked on CAE integration of autonomous vehicles, LiDAR, and camera's structural and dynamic stability analysis.

Education

MTech, Machine Design. India Institute of Technology. 2000

BTech, Mechanical Engineering. Walchand College of Engineering. 1997

Licenses & Certifications

- Six Sigma Green Belt Certification (DMAIC & DFSS)

Contact Information

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ESi

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Areas of Specialization

- Advanced Driver Assistance Systems (ADAS)
- Camera, Radar & Ultrasonic Sensors
- Hardware-in-the-Loop (HIL)
- Vehicle Engineering
- Virtual Verification & Simulation
- Product Liability
- Failure Analysis
- Finite Element Analysis (FEA)

Positions Held

Engineering Systems Inc., Ann Arbor, Michigan

- Senior Staff Consultant, 2025–Present

Robert Bosch, Plymouth, Michigan

- Senior Technical Project Manager, 2023–2025

Stoneridge, Novi, Michigan

- Senior System Test Engineer, ADAS, 2023–2023

Ford Motor Company, Dearborn, Michigan

- Product Owner, Human-Machine Interface (HMI) Architecture, 2022–2023
- ADAS Systems Architect, 2021–2022
- Hardware-in-the-loop (HIL) Test Management, 2020–2021
- Systems Engineering (MBSE) Integration Lead, 2018–2020
- CAE Integration Lead, Autonomous Vehicle, 2016–2018

Tata Consultancy Services, Warsaw, Indiana

- Program and Project Management, 2011–2015
- Technical Lead, Virtual Verification, 2007–2011
- Simulation/CAE, Durability, Thermal, Structural, 2003–2007

Professional Affiliations/Honors

Institute of Electrical and Electronics Engineers

- Member, 2024–Present

SAE International

- Member, J3292, Automated Vehicle Marshalling System Task Force, 2024–Present

Tech.AD USA

- Chair, Autonomous Driving Technologies Speakers Sessions, 2020

Society of Mechatronics Engineers

- Advisor, Texas A&M University, 2025–Present

Ford Motor Company

- Peer Reviewer & Selection Committee Member, NextGen Change Makers Awards, 2020
- Panelist, NextGen Product Development Day, 2022
- Intern Mentor, ADAS Department, 2021–2023
- Co-chair & Founding Member, NextGen Group, 2018–2020
- Recipient, Fort + Champion Award, 2022

University of Michigan

- Member, M-City Autonomy Project Research Team, 2024–Present
- PhD Student Mentor, ADAS Features System Architecture, 2014–Present