AMAR B. AWALE
AUTOMOTIVE GROUP, ADAS
SENIOR STAFF CONSULTANT

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Mr. Amar Awale is a Senior Staff Consultant with over 23+ years of experience in the Automotive industry, including 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 & 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 worked on Human-Machine Interface (HMI) Architecture, which includes Service-Oriented Architecture (SOA) services creation in a Software-Defined Vehicle (SDV) Architecture and feature modeling with a Model-Based Systems Engineering (MBSE) approach.

Mr. Awale worked on HIL (hardware-in-the-loop simulation) testing and validation of ADAS features such as Traffic Sign Recognition (TSR), Automatic Emergency Braking (AEB), and Lane Keeping Assist (LKS), and 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. Amar holds a master's degree in Machine Design from the India Institute of Technology (IIT), Madras, India, and a bachelor's degree in Mechanical Engineering.

Areas of Specialization

Advance 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)

Education

- M.Tech Machine Design, Indian Institute of Technology (IIT, Madras), 2000
- B. Tech Mechanical Engineering, Walchand College of Engineering, 1997

Certifications

- Six Sigma Green Belt Certified (DMAIC and DFSS Projects**)**

Positions Held

Engineering Systems Inc., Ann Arbor, Michigan

- Sr. Staff Consultant, 2025 – Present
  Automotive group, ADAS research. Testing and Validation

Robert Bosch, Plymouth, Michigan

- Senior Technical Project Manager, 2023 – 2025
  Parking and Visualization, ADAS Automotive domain

Stoneridge, Novi, Michigan

- Senior System Test Engineer, ADAS, 2023 -2023
  Camera Monitoring System (CMS), Heavy Trucks and Construction Equipment

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 (IEEE) Member Since 2024
- SAE J3292 - Automated Vehicle Marshalling System task force, SAE International
- Chair of Autonomous Driving Technologies Speakers Sessions and Lead challenge the peer's discussion on Autonomous Driving Tech Agenda | Tech.AD USA
- SOMTECH (Society of Mechatronics Engineers) at Texas A&M University Advisor along with Professors and academic sponsors.
- Peer Reviewer and selection committee member to choose winners for Ford NextGen Change Makers Awards for innovation projects.
- Panelist for Ford Nextgen Product Development Day with Senior Leadership of Ford Motor Company.

- Part of Research Team at University of Michigan M-City Autonomy project with Research director and Professors of University of Michigan.
- Mentor for University of Michigan PHD students on ADAS Features System Architecture, testing.
- Mentor of Interns at ADAS department of Ford Motor Company
- Co-chair of Ford Nextgen Group at Ford Motor Company. (Founding Member

Awards

- Prestigious Ford + Champion 2022 Award for recognition on the initiative to create dynamic link between young talent and senior leadership