

**VISHNU VASAN**  
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**Mobile:** +91-74113-67797  
**E-mail:**

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- 4+yrs of Experience in Different Phases of Automotive Embedded Product Development ranging from Software Development to Testing
  - Good Development and Debugging Skills in Modeling environment like ASCET, MATLAB, Simulink, State Flow , LogiCAD and SciLab
  - Extensive Working Experience in Software Development (Modeling) ,Script Development, Tool Development and Different Testing Techniques
  - Hands-on Experience in Tool Development for better Efficiency
  - Ability to quickly grasp the Functionality of system under Development/Test and adapting to changes easily

### **Professional Experience**

**Lead Engineer - Mercedes-Benz Research and Development India, Bangalore**  
Sep 13 to Till Date

- Tools - Matlab/Simulink/Target Link, VB, dSPACE HIL, PROVEch TA , INCA & Track+
- AGK Exhaust Sensors Integration in the Engine Plant Model
- Analysis, Design, Development and Integration of the Exhaust Sensors in Engine Model
- Writing SDD/Integration document and capture the delta changes into the model for the back trace-ability
- Involved in Development of Real Time Scripts in VB Based Language for Testing the ECU Software/HIL Model Signals

- Developed Independent Wrappers/Functionalities for the HIL Environment based on ASAP3 and MCD3 Protocol using COM/.NET Interface
- Developed the Real Time Scripts for the Idle Speed Target and Torque Coordination Tests from Scratch
- Developed Configurable HTML Report Generator for Carrying out Tests

- **Tools Developed:**

- **Offline Parameterization Tool:**

Description: Calibration Values are loaded in m file for a given model and imported in to workspace. To change the values based on new DCM for better performance needs lot of manual effort. So the m script is updated automatically with the values from DCM.

Input : M script with Calibration Values, DCM

Output : New M script with Updated Values

from DCM

Languages : Perl

Standard : NIL

Creator : Self

- **DCM Parser:**

Description: A Lightweight DCM Parser to read the different calibration

### Values in the DCM

Input : DCM  
Output : Based on APIs  
Languages : Perl  
Standard : ASAM  
Creator : Self

### **Senior Software Engineer - Robert Bosch Engineering and Business Solutions, Coimbatore**

Feb 11 to Sep 13

- Tools - ASCET, MATLAB, Simulink, State Flow, Code Wright , INCA, Clear Quest ,Request One , FLOW5 , TPT/ECCo , RTRT/UTE17 , IRIS Lab Car ( Open Loop & Closed Loop ) , SDOM , Nestor
- Customers - PSA/ Citroën, VW, RSA, BMW
- Involved in Development of Various Functions for Engine Control unit ( Glow Plug Actuator Test, Torque distribution/Reservation during Maximum Load, Idle Speed Control and Ignition Angle Control to avoid Knocking)
- Involved in Efficient State Flow/State Machine Design in both ASCET and MATLAB
- Involved in generating BOSCH specific code directly from MATLAB (Involved in TLC scripting for customizing MATLAB to generate BOSCH specific code. Also in converting BOSCH platform functions to MATLAB functions via Legacy Code Converter and Target Function Libraries )
- Involved in Exploring different possibilities of Efficient Model Sharing between different Customers /OEMs in AUTOSAR/NON AUTOSAR environments

- Involved in Integration of Customer Specific AUTOSAR functions into ECU software and also developed necessary adapters for the interface of the functions
- Involved in Variant Specific Software Customization based on Software Architecture system constants and was involved in its optimization
- Involved in Different Efficient Measures/Tool Development for better Productivity
- Tools Developed :

- **D2M Generator (Data to Model Generator):**

Description: Creates ASCET Model (AUTOSAR /MSR) directly from

User Specified Inputs. This tool is predominantly created

For Generation of Adapters for both AUTOSAR and MSR

Functions. Well Appreciated and First of its Kind in RB.

Very Flexible Tool and can be used for variety of tasks other

Than Model Creation like Individual Variable Creation,

Calibration Data Feed etc.

Input : DOCMISC/.XLS/.PDF/.TXT

Output : ASCET Model

Languages : Perl, C#, Ghost Script, Windows Shell

Standard : AUTOSAR, MSR

Used in Phases : Development

Creator : Self

▪ **A2L Extractor:**

Description: Extracts the User Specific Variable Information from A2L

File and Represents in terms of Web Page

Input : A2L File

Variables to be Extracted (Either Command Line /.XLS)

Output : HTML Page with Variable Specifications

Languages : Perl, HTML

Standard : ASAP

Used in Phases : Requirement Analysis and Test Case Generation.

Creator : Self

▪ **E-HOOKS Generator:**

Description: Creates Switches for Variables to enable Value Forcing

Input : PAVAST File of the Function (Command Line)

Output : Configuration .INI File to be used for Integration

Languages : Perl

Standard : NIL

Used in Phases : Integration

Creator : Self

**Embedded Engineer - AUTOMOTIVE INFOTRONICS**  
**(A Joint Venture between Ashok Leyland & Continental AG)**  
**R&D Pvt. Ltd, Chennai**  
Mar 2010 to Feb 2011

- Tools - LogiCAD, Gravis , CANlyzer , CANoe , VehicleSpy, Softune
- Customers - Continental AG , Ashok Leyland , Lindner
- **ITS (Intelligent Tire System):**
  - Involved in Preparing System Requirement Specification, Traceability Matrix, Requirement Matrix for Intelligent Tire System Display Unit (ITS)
  - Involved in implementation of Tire Configuration Computation Algorithm
  - Involved in the Development of various Screens and the Integration of Screens with the Logical modules for ITS
- **FVDP (Future Vehicle Development Plan) - Integration of BCU & ML Cluster :**
  - Involved in Unit, Integration and System Testing of ML and BCU
  - Identification of Test Scenarios and Test data based on the requirement Specified
  - Preparing Test Cases, Test Summary Reports ,Weekly Status Reports and Defect Logs
  - Active participation in Defect management and Bug Closure Scenarios
  - Developed Tell Tale Module and Power On Self-Test

Languages : Embedded C, VB

Scripting Languages : Perl, Python, Scala

Tools : ASCET, MATLAB, Simulink, State Flow, LogiCAD, Code Wright,

Softune, Gravis, CANoe, CANlyzer, VehicleSpy, SciLab, PROVETech

OS : Windows Suite, Linux Flavors, OS X

## **Education**

<b>Educational Qualification</b>	<b>Name of School/ College/ University.</b>	<b>Year of Passing</b>	<b>Percentage of Marks</b>
B.E(Electronics & Communication)	Saranathan College Of Engineering, Trichy	April 2008	77
H.Sc ( TamilNadu State Board)	Maxwell Matric Hr. Sec School, Thanjavur	April 2004	93
S.S.L.C (Matriculation Board)	Sri Srinivasa Matric Hr. Sec School, Orathanadu	April 2002	84

### **Personal Profile**

**Date of Birth & Age** : 09<sup>th</sup> November 1987, 27 Yrs.

**Gender** : Male

**Language Proficiency** : English, Tamil

**Address** : B-10, New Housing Unit, Mannargudi, Thiruvarur(Dist.),Tamil Nadu.