### **Arun Kumar Misra**

Email: misra.arunkumar@gmail.com Mobile: +44-7305953353

#### **Professional Experience**

Overall 11+ years of experience in Product Engineering and Services (Systems, Application, Software and Hardware) for Automotive Embedded Systems and Electronics.

Company : DELPHI Technologies
Position : Principle Software Engineer

Team : Powertrain – Delphi Technologies Commercial Vehicles

Duration : Mar. 2007 - Till date

#### **Technical description:**

Model Based Software Development, M Scripting

· Good in Embedded C and MATLAB,

AUTOSAR compliance

- Good knowledge of MISRA rules and use of QAC tool.
- Functional Testing, Test plans activities.
- Knowledge of embedded software development and Validation
- Effort Estimation, Planning, Work Allocation, Tracking, Monitoring execution
- Risk assessment, Defect tracking, Risk Escalation, Managing stake holders etc
- Software Integration
- Involved in S-Function Test and debugging of software
- Worked on ASAP2, CAN, CCP, KWP, J1939
- Worked on Auto coding and Reactis based testing.

#### **Technical Skill Set:**

Programming Languages : C, Embedded C, VC++, MFC

Scripting Language : Perl MScripting

Protocols : CCP, KWP, J1939, CAN,

Software Tools : CANalyzer, RTRT, Polyspace, CDT, QAC, MATLAB.

Configuration Tool : ClearCase

#### **Projects:**

Project 1: Model Base SW Implementation for Euro VI

Client: DAF Trucks and Lorries, Europe.

Tools: Matlab Reactis, ISOLAR

Team size: 10

The main objective of the project to Implement Model Based Requirement from Customer. Generate the code, integrate and build the software, Generate the Reactis test suit and sFunction, perform testing on sFunction using reactis generated test suit and generate the result. Prepare the release note, Deliver the Software to customer with Release note along with test Results.

**Project 2: RELATIVE PROCESSOR LOAD ESTIMATOR** 

Client: DAF Trucks and Lorries, Europe.

Language: Matlab Scripting

Tools: Matlab Team size: 2 The main objective of the project to predict load index and relative load factor by counting number of block and libraries in the model. This tool provides relative processor load to the user.

# Project 3: Development of Software\Verification on DAF EMS FOR HEAVY DUTY by Model Based Development and test Automation using Reactis

Client: DAF Trucks and Lorries, Europe.

Language : Embedded C

Tools : Matlab, Reactis, Common Development Tool, QAC

Team Size : 10 members

The main objective here is to implement right Software for the Diesel based Vehicles as per Customer Requirements. The controller used was ETC - Electronic Truck Control version 3.

#### Role in project:

Generation of Code using Matlab 2011b

- Generation of Reactis test suit using Reactis tool.
- Generation of S Fucntion using Matlab
- Performing S Function Test using Matlab
- Integration of Software
- Preparation of Release notes to be delivered to customer
- Actively involved in the investigation of PN's
- Involved in the code reviews as per DDS-HD coding guidelines.
- Functional\Integration testing (VVT) on the Test Bench simulator using CDT.
- Test plan (084) updates.

# Project 4: SOFTWARE IMPLEMENTATION\VVT ON DAF EMS FOR HEAVY VEHICLES (EURO 6 REGULATION).

Client : DAF Trucks and Lorries, Europe.

Language : Embedded C

Tools : Common Development Tool, QAC

Team Size : 13 members

The main objective here is to implement right Software for the Diesel based Vehicles as per Customer Requirements. The controller used was ETC - Electronic Truck Control version 3.

#### Role in project:

- Involved in the code implementation for many of the modules like J1939, KWP 2000 and INP etc by referring SIMULINK models of requirement specification (077).
- Acquaintance with automotive communication protocols like CCP, J1939 and KWP 2000.
- Actively involved in the investigation of PN's and successfully fixed issues in the code.
- Involved in the code reviews as per DDS-HD coding guidelines.
- Functional testing (VVT) on the Test Bench simulator using CDT.
- Test plan (084) updates.

## Project 5: SOFTWARE IMPLEMENTATION\VVT ON DAF EMS FOR HEAVY VEHICLES (EURO 5 REGULATION).

Client : DAF Trucks and Lorries, Europe.

Language : Embedded C

Tools : Common Development Tool, QAC

Team Size : 10 members

The main objective here is to implement right Software for the Diesel based Vehicles as per Customer Requirements. The controller used was ETC - Electronic Truck Control version 2.5.

#### Role in project:

- Involved in the code implementation for many of the modules like J1939, KWP 2000 and INP etc by referring SIMULINK models of requirement specification (077).
- Acquaintance with automotive communication protocols like CCP, J1939 and KWP 2000.
- Actively involved in the investigation of PN's and successfully fixed issues in the code.
- Involved in the code reviews as per DDS-HD coding guidelines.
- Functional testing (VVT) on the Test Bench simulator using CDT.
- Test plan (084) updates.

## Project 6: SOFTWARE IMPLEMENTATION\VVT ON HYUNDAI EMS FOR HEAVY VEHICLES Euro 6

Client : Hyundai Trucks, South Korea.

Language : Embedded C

Tools : Common Development Tool, QA C, Diab Compiler.

Team Size : 17 members

The main objective here is to implement right Software for the Diesel based Vehicles as per Customer Requirements. The controller used was ETC - Electronic Truck Control version 3.

#### Role in project:

- ETC2 Application software development using ANSI C following MISRA guidelines with textual requirements as an input.
- Code bug fixes and code reviews.
- Performed Failure mode effective analysis (FMEA).
- Requirement specification (077) updates.

### Project 7: SOFTWARE IMPLEMENTATION\VVT ON HYUNDAI EMS FOR HEAVY VEHICLES

Client : Hyundai Trucks, South Korea.

Language : Embedded C

Tools : Common Development Tool, QA C, Diab Compiler.

Team Size : 17 members

The main objective here is to implement right Software for the Diesel based Vehicles as per Customer Requirements. The controller used was ETC - Electronic Truck Control version 2.5.

#### Role in project:

- ETC2 Application software development using ANSI C following MISRA guidelines with textual requirements as an input.
- · Code bug fixes and code reviews.
- Performed Failure mode effective analysis (FMEA).
- Requirement specification (077) updates.

# Project 8: SOFTWARE IMPLEMENTATION ON DAF EMS FOR HEAVY VEHICLES (US 10 REGULATION).

Client : DAF Trucks and Lorries, America

Language : Embedded C

Tools : Common Development Tool, ENV GEN, QA C, Diab Compiler.

Team Size : 19 members

The main objective here is to implement right Software for the Diesel based Vehicles as per Customer Requirements. The controller used was ETC - Electronic Truck Control version 3.0.

#### Role in project:

- Co-ordination for Functional Testing and Testing plans.
- Functional testing (VVT) on the Test Bench simulator using CDT.
- Supported for Unit Testing activities using Polyspace and RTRT Tools.
- Involved in the code implementation for many of the modules like INP, Eng and Veh etc by referring SIMULINK models of requirement specification (077).

#### Project 9: DEVELOPMENT OF ECU CALIBRATION AND MONITORING TOOL ON VC++.

Client : DAF Trucks and Lorries, Europe.

Tools : VC++

Language : C++ using MFC.

Team size : 02 Role in Project:

- Involved in the preparation of Requirement documents, Coding and bug fixing.
- Completely responsible for Build, Packaging and Release of the Common Development Tool to the customer.
- Preparation of Verification and validation Test (VVT) plans Documents and Execution of test plans. Testing was focused on functional testing, precision testing, and performance testing.

#### **Project 10: DEVELOPMENT OF A2L Generator.**

Client : DAF Trucks and Lorries, Europe.

Language: C++ using MFC.

Team size : 02 Role in Project:

- Involved in the preparation of Requirement documents, Coding and bug fixing.
- Completely responsible for Build, Packaging and Release of the A2L Generator Tool to the customer.

• Preparation of Verification and validation Test (VVT) plans Documents and Execution of test plans. Testing was focused on functional testing, precision testing, and performance testing.

#### **Educational Qualification:**

- M. Tech in Bioelectronics(Instrumentation) Engg. From Tezpur Central University in 2006 with a C.G.P.A. of 8.17/10.0.
- M.Sc. in Electronics from C.S.J.M. University, Kanpur with 70.0 % marks.

#### **Achievements**

- Won Delphi's "Directors Club Award" which is the elitist recognition for consistent individual performance and contribution to the business outcome in Delphi Automotive Systems, Technical Center India.
- Played key role in Product Engineering and Services within the Commercial Vehicle Electronics Engineering Group through driving excellence in Project Execution and Project Deliveries.
- Won Excellence Award and Recognition from customer for consistent contribution in offering engineering solutions and in resolving technical issues on time and meeting the project schedules and successfully meeting the Series production (SOP) timelines.
- Won Delphi's "Customer Focus" Award for demonstrating Delphi's Absolutes of Excellence work culture.
- Was nominated twice for Delphi's "Glen D Hall Memorial" Mentoring Award towards excellence in Mentorship.

#### **Personal Details**

Address: 54, Grange Road, Strood, Rochester – ME2 4DB

Passport No: Z2347067 Marital status: Married Sex: Male

#### **Declaration:**

I do hereby declare that all the statements furnished above are true to the best of my knowledge and belief.

Place: Bangalore Arun Kumar Misra