









Curriculum Vitae

PERSONAL INFORMATION

Balaji Potnuri

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-  Skype balaji.potnuri

Passport - Z3500511; Visa: Permanent settlement + EU Blue Card
Job Experience : 13 Years of Embedded Product Development and Testing

WORK EXPERIENCE

April 2019– bis Jetzt

Software Engineer in Valeo Siemens eAutomotive GmbH

- Writing test specifications based on software requirements and test automation and development with ECU-TEST-Tool.
- Test bench -dSPACE micro Lab-Box
- SW tools - Diagram D, VW-ODIS ,ETAS-INCA, Vector Canapés, Canoe, CDM studio,Tractronics ECU Test
- Performing basic inverter SW functional tests (e.g. temperature derating, network management tests for controller sleep and wake-up, resolver offset calibration) and flash tests before delivery to customer.
- Good Knowledge in the areas of Diagnostics UDS , ZDC, SFD, WFS
- Support resident engineers in software flashing and end-of-line testing before and after production.
- Testing of fault simulation of Fusi (ISO26262) and QM (Non-Fusi).
- Analysing HIL issues and repairing or coordinating with HIL infrastructure team for hardware changes.
- Testing various system functions and monitoring and diagnosing system interfaces.
- On-site visit at VW Zwickau and Kassel to analyse and fix problems such as flashing, coding of model parameters during production assembly and vehicle testing
- Performed vehicle testing, NVM and security testing, and assisted Colleagues in flashing software with various protocols with and without vehicle gateway.

2 Oct 2017–30 March 2019

Software Test Engineer in IQ intelligentes Ingenieur Management GmbH

- Writing test specifications based on software requirements and test automation and development with ECU-TEST-Tool.
- Test bench -dSPACE micro Lab-Box
- SW tools - Diagram D, ODIS , ETAS-INCA, Vector Canapés, Canoe, CDM studio
- Testing various system functions and monitoring and diagnosing system interfaces

2 Mar 2015–20 Sep 2017

Senior Engineer

Robert Bosch Engineering Business Solutions Limited
Prestige Tech Park, B-Wing, Elnath Block, Marathahalli, Bengaluru, Karnataka, 560103 (India)
http://www.bosch-india-software.com/en/homepage/rbei_homepage.html

SW-Tools – dSPACEControlDesk, Automation Desk, RTILib, Matlab/Simulink

- Writing test specifications from functional requirements and test script development.

- dSPACE HIL test bench (Mid-Size Simulator-SCALEXIO) setup and configuration of the pins to the ECU.
- Supported for HIL load box support for the Body control module of AUDI and Setup of Dspace HIL Environment and platform registration
- Development of customized test libraries with test automation blocks and access to objects with the HIL APIs
- Development and maintenance of test run tool and effective HIL usage timing calculator with the help of automated scripts access to Microsoft Outlook

20 Jun 2011–18 Feb 2015

Senior Software Engineer

Larsen and Toubro Technology services Limited, Bangalore (India)

SW-Tools – dSPACEControlDesk, Automation Desk, RTILib, Matlab/Simulink

- Experience in the Plant Model based development of Agricultural machines(Round and square balers , Cash crop high(CCH), Combine Harvester CIH; CNH) and constructional equipment(wheel loader excavator) of Case New Holland Belgium and North America
- Model based HIL system testing of the Agricultural and Constructional machines
- Development of customized test case architectures with Python script for editing, framing and finally generating test report instead of using built-in test frame work builder.
- Perform various test categories such as fault diagnosis, calibration, interlocking, and functional testing.
- Update the IO model user interfaces to add the test signals and generate the system description file (SDF) by building the Matlab model.
- Technically supported by Offshore for system integration and interfaces Matlab to dSPACE test environment and processing test stimulus.
- Implementation of Diagnostic Protocol (keyword protocol) for system calibration in Automation Desk.

10 May 2010–17 Jun 2011

Team Member

Sirveen Control Systems, Hyderabad (India)

SW /HW Tools- Keil uVision 3, Cross compiler ARM(LPC2148), Boolean logical programming, Embedded C, Epsilon dot matrix parallel printer driver development

- Collected the data from the field via the serial port and created an offline report for every three months and sent it to RDSO during the test phase.
- Modified and tested the firmware code to work for both machines (WDM2 and WDS6)

8 Aug 2008–5 May 2010

Product Engineer Trainee

Maithreya Products, Hyderabad (India)

SW /HW Tools- HEW Cross Compiler, R8C/M16c62P Controller Programming Embedded C

- Involved in embedded C code development and controller interfacing software.
- Master controller interfaces and its hardware design and prototype development.
- Presentation of the product features to the customers.



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EDUCATION AND TRAINING

15 Jun 2002–29 Apr 2006

Bachelor of Technology in Electronics and Communications Engineering

Distinction

Lakireddy Balireddy College of Engineering, Mylavaram, Krishna district, Andhra Pradesh Indian affiliated to Jawaharlal Technological University, Hyderabad, Indien

Awarded with Distinction with overall percentages of 70,17

PERSONAL SKILLS

FREMDSPRACHE

	Reading		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	B2	C1
With Level of A2 in German language course					

Communication skills

Good communication skills gained through my work experience
Capable of leading team size from 4 to 6

Organisational / managerial skills

Good Team Leading Skills,
Ownership of tasks task and sales and driving to close and provide solutions.
Conduct some Training and knowledge sharing sessions and test system awareness programs.

Onsite Job Experience

3 months experience in model based Fusi layered SIL testing at BMW in Frankfurt, Germany in 2014 (February to April).

3 months experience understanding round and square baler system and creating test automation packages for system testing at CNH in Brussels, Belgium in 2014 (June to August)

On-site visit to VW Zwickau and Kassel to analyse and troubleshoot issues such as flashing, coding of model parameters during production assembly and vehicle testing.

Job-related skills

- Efficient in handling the critical tasks that have been assigned to me
- Good programming skills in Python and C and C ++.
- Good knowledge in E2E Safety and ASPICE level testing
- Good knowledge in diagnostic protocol services UDS and communication CAN LIN protocol
- Good system understanding and efficient test automation script development and hardware in loop test bench configuration and load box maintenance
- Prepare custom libraries with Python modules and define test strategies and support other projects using dSPACE tools
- Develop hydraulic models with physical equations in the Simulink environment and integrate them into the system model to simulate the dynamic model and fine-tune the model parameters to achieve the functional behaviour of the system
- Update the signal input and output interfaces for the Matlab / Simulink system simulation models.

Programming Languages	C, Embedded C,C++
Scripting Language	Python,CAPL
SW Flashing tools	RA Consulting DiagRA D, VW ODIS
HW Flashing tools	CancaseXL, xsLite(OBD), VAS6154(CAN) / VAS6154a(CANFD)
Testing tools	Dspace Automation desk, ControlDesk, Tractronics ECU-Test
Measure and Calibration tools	Vector Canape, ETAS INCA
Tracing Tools	Vector Canoe, Canalyzer
Micro processor/Controller	Aurix Tricore, ARM LPC 2148, R8C and M16/32P
Debugger/Emulator	Lauterbach, Renensas R8/M16c Family Emulation debugger
Requirement Management tool	IBM Rational Doors, Polarion Siemens tools
Version Management tools	GitHub, IBM Rational Clear case ,Tortoise SVN
Control Management tools	IBM Rational Clear Quest
Simulation & Development	Matlab Simulink and State flow
RTI interfaces to Simulink models	dSPACE RTI Library set
Code Generation Tool	Real Time Embedded workshop (RTW)