**Dascalu David-Ionut**

Leamington Spa

Personal Statement

I am currently working as a contractor with the role Embedded Software Engineer at ZF(UK) in Shirley. I have been working here since October 2017. I have accumulated 10 years of experience in the Automotive field with advanced knowledge in Matlab/Simulink/Stateflow and Targetlink code generation. I also have experience with hand written embedded C code.

Work History

|  |  |
| --- | --- |
| **Embedded Software Engineer** | October 2017 – Present |

ZF Group, Shirley

* Working in the Basic Software Autosar team in DaVinci Configurator to provide low-level implementation for the EPS(electric power steering) system.
* Generating code out of DaVinci Configurator and testing it in Tasking Eclipse VX-toolset.

|  |  |
| --- | --- |
| **Power Supply Software Engineer** | September 2015 – October 2017 |

Jaguar Land Rover

* Maintenance and developing of Matlab/Simulink models for Power Supply Control System. Developing in SystemDesk the Autosar specific design for the models and exporting the arxml file. Importing the arxml file to populate the dSPACE Data Dictionary.
* Creating the Autosar frame model and populating it with the Simulink implementation.
* Generating Targetlink C code out of the frame model.
* Generating the container files from the Data Dictionary to import back to SystemDesk.
* Performing MIL/SIL tests for the models.
* Performing HIL black box testing

|  |  |
| --- | --- |
| **Embedded Software Developer** | July 2007 – August 2015 |

Hella Electronics Romania – Craiova R&D Center

* 02.2015 – 08.2015:

Maintenance of ClampControl Matlab/Simulink model for Kessy MQB-B, MQB-A and PQ35 VW projects and developing new features for Display Strategy module – developing the new feature for Display Strategy module in Innovator, writing Software Requirements and developing the Software Design in Innovator.

* 2012 – 2015:

Developing Matlab/Simulink model for ASILB component Blinker and writing Software/Functional Requirements for BCM2Evo project for Audi – developing Matlab/Simukink model for Blinker, writing Software/Functional Requirements and performing developer testing on the microcontroller board or Test bench. Generating Targetlink C code from the Matlab module.

* 2011 – 2012:

Developing Matlab/Simulink model for Virtual Pedal and writing Software Requirements - developing the Matlab model algorithm for the application of Virtual Pedal. Generating TargetLink C code from the Matlab module. Presentation to Renault with the algorithm created on a real car. From 2011 to 2012.

* 2007 – 2011:

Maintenance of Matlab/Simukink models for BCM PQ35 VW project and writing Software/Functional Requirements – developing new features and maintenance of Central Door Locking, Anti Theft Warning System, Convenience Manager, Safe Led, Comfort and Latch control models. Generating TargetLink C code from the Matlab modules.From 2007 to 2011.

Skills and Abilities

**Advanced Matlab/Simulink/Stateflow knowledge and auto code generation**

* Working with Matlab/Simulink/Stateflow since July 2007 for different modules and different projects
* Auto code generation using Targetlink and Embedded Coder
* Writing Embedded C code for different applications

**Writing ASILB and QM Software Requirements in DOORS**

* Writing the ASILB Functional Safety Requirements for Blinker has put me in contact with Functional Safety needs: what is a Functional Safety module and how to write Requirements for such a module.
* Good knowledge of DOORS - tool used for where to write Requirements.

**AUTOSAR knowledge**

* Knowledge of Autosar concept and software architecture

**PTC/MKS Integrity Client knowledge**

* The Matlab modules developed and the C code source files were uploaded intro PTC/MKS Integrity client.

**Innovator knowledge**

* Kessy MQB-B project used for the software design and implementation the Innovator tool. Knowledge of creating the software design in Innovator and using Nassi-Schneiderman diagrams for writing embedded C code.

**CANoe and WinIdea knowledge for debugging pruposes**

* Knowledge of CANoe for debugging, collecting and running traces/logs for analysis.
* Knowledge of WinIdea for debugging the generated or hand written C code

**SystemDesk knowledge for architectural design of the software component**

* Creating the runnables, interfaces(Sender-Receiver, Client-Server), inter-runnable variables and parameters of the Software Components. Creating application specific data types to sustain the necessary implementation. Validating and fixing the possible errors that occur on validation of the design. Exporting the arxml file from SystemDesk.

**SVN knowledge**

* General work in relation to the SVN tool (commit, erase or update files).

**DaVinci Configurator knowledge for configurating the basic software**

* Implementing different configurations for the basic software and generating the code for testing purposes.

**Tasking Eclipse knowledge**

* Compiling the source files and building the project into an .elf file.

**UDE knowledge**

* Flashing the software onto the hardware and debugging it via UDE.

Education

**Master of Engineer Degree in Automation of Complex Systems**

|  |  |
| --- | --- |
| Faculty of Automation, Computers and Electronics, Craiova, Romania | 2007 – 2009 |
|  |  |

**Bachelor of Engineering Degree**

|  |  |
| --- | --- |
| Faculty of Automation, Computers and Electronics, Craiova, Romania | 2002 – 2007 |

Interests

Outside of the work program hours I like to relax by watching movies(avid movie consumer), listening to music, watching sports(Tennis, Football, Basketball) and reading books(I think that one should always develop as a person). I like to keep in shape so I always run in the park or play Basketball. I like playing chess.