

PERSONAL INFORMATION

Valentin Mircea Lupea



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JOB APPLIED FOR

Software Engineer

WORK EXPERIENCE

1 Aug 2008–Present

Software Engineer (Senior level I from October 2014)

Continental Automotive Romania, Timisoara (Romania)

Projects involved and main activities (all part of BCM product):

1. BSX2010 / BSX2010 prime (PSA project):

- Output failure detection and protection strategy (application part: based on value read from basic software and application state perform protection on given outputs);
- Automatic testing for output failure detection and protection strategy (CAPL);
- Interaction with customer (PSA) during its visit in Timisoara on output failure detection and protection strategy topics.

2. SAAB:

- LIN driver integration (from Vector);
- CAN driver integration (from Vector) - review with Vector during its visit in Timisoara;
- LIN application part (Intelligent battery sensor as slave) - live phone review with customer (SAAB);
- Output failure detection and protection strategy (basic software part: TLE commands on SPI to perform diagnostic operations; application part: based on value read from basic software and application state perform protection on given outputs);
- CAN gateway - review with Vector engineer during his visit in Timisoara;
- Validation of SW - additional SW testing (part of tests done directly on the vehicle) to support CFT team;
- CANoe update after new CAN matrix and LIN bus integration;
- Automatic script to Investigate EEPROM lost after reset issue (C, C#, CAPL);
- Investigate various issues reported by SAAB/CFT team on different functionalities (small team 2-3 developers to handle the entire SW application and basic software part).

3. BCM2010 (NISSAN):

- CAN Station Management;
- Exterior lights - day time running lights (live review with customer (NISSAN) during its visit in Timisoara);
- Investigate various issues reported by NISSAN/CFT team on different functionalities (small team 2 developers and the SWPM to handle the entire SW application part);
- Validation of SW - additional SW testing to support CFT team.

4. Porsche:

- ESCL (Statemate model);
- IMMOBILIZER (Statemate model);
- CAN, LIN support.

5. NISSAN BDL3, 4, 5, x, X11Q, BCM2010:

- CDL - single responsible for all project locations (Romania, France, Tunisia);
 - Coordinate small team of developers (2-3) on CDL function;
 - Strong interaction with customer (NISSAN) during red alerts investigations with positive results - very good feedback received from Continental top level management responsible on all NISSAN projects during his visit in Timisoara;
 - Retain accessory power function on X11Q project - full implementation;
 - TPMS SBF function on X11Q project - full implementation;
 - CDL redesign for next generation of vehicles - AUTOSAR client-server model implemented;
 - CAN Station Management responsible for Romania location;
6. DFL 531, DFL 591 (reuse from NISSAN BDLx project - Chinese customer):
- CDL responsible for Romania location;
 - CAN Station Management responsible for Romania location;

Other activities not related to a specific project:

- Improve review efficiency on Timisoara IBS department level;
- Demo Car coordination within BCM SW group;
- SWATT automatic testing improvement of environment setup;
- Deploy Collaborator review tool within IBS department;
- Continental SW conference participation with an article covering review best practices and correct mind set;
- Propose students diploma projects and coordinate them (e.g. Demo car);
- Introduction to CAN presentation held at "Politehnica" University;
- IBS school training on Vector CANoe;
- Impact analysis presentation within NISSAN project team - best practices and how to;
- Technical interviews with students for internship;
- Full reviews participation on various functionalities (others than the ones mentioned above);
- Offer support/coach for inexperienced colleagues on various functionalities;
- Responsible to identify possible SW improvements on activities involved (propose generic solutions were possible; improve SW testing by proposing and implementing automatic testing scripts).

17 May 2006–31 Jul 2008

Assistant Programmer

Continental Automotive Romania, Timisoara (Romania)

Projects involved and main activities:

BMW:

- Development of CANoe Simulation environment

FORD:

- Development of CANoe Simulation environment

EDUCATION AND TRAINING

1 Oct 2010–14 Feb 2014

Doctor degree in Computer Science

"Politehnica" University, Timisoara (Romania)

Field: Artificial Intelligence - neural networks.

1 Oct 2008–30 Jun 2010

Master degree in Computer Science

"Politehnica" University, Timisoara (Romania)

Field: Advanced Computing

1 Oct 2003–30 Jun 2008 Engineer degree in Telecommunication and Electronics Science
"Politehnica" University, Timisoara (Romania)

15 Sep 1999–30 Jun 2003 Bachelor degree in Mathematics and Information Science
"Avram Iancu" National College, Brad (Romania)

PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
[Common European Framework of Reference for Languages](#)

Communication skills Ability to extract relevant information and present it to the customer (GL/TL, SWPM, OEM).
Provide constructive feedbacks.
Able to clearly define/track tasks for the people in my responsibility.

Request feedback for my activities and try to act accordingly.
Open to others opinion.

Job-related skills Programming languages:
C - advanced
C# - advanced
Java - medium
C++ - medium
Advanced know-how in:
Vector tools (e.g CANoe, CANape, CAPL), uC, DOORS, SYNERGY, MKS, Microsoft Office, XML, XSL, WinIdea, Code Collaborator, Microsoft Visio, IBM RTR.

Digital competence

Information processing	SELF-ASSESSMENT			
	Communication	Content creation	Safety	Problem solving
Independent user	Independent user	Independent user	Independent user	Independent user

[Digital competences - Self-assessment grid](#)

Other skills Team spirit;
Good ability to work in an multi national and cultural environment;

React well under pressure;
Serious and punctual;
Hard working;

Open to change;
Eager to learn and progress;
Self motivated.

ADDITIONAL INFORMATION

- Publications**
- L. V. M and C. G. C., "Multi-Valued Neuron with a periodic activation function - learning with negative examples," *Applied Computational Intelligence and Informatics (SACI), 2014 IEEE 9th International Symposium on*, Timisoara, 2014, pp. 237-241.
doi: 10.1109/SACI.2014.6840067
keywords: {learning (artificial intelligence);neural nets;transfer functions;learning;multivalued neuron;negative example;nonlinear problems;periodic activation function;single neuron;Artificial neural networks;Computational intelligence;Encoding;Iris;Neurons;Testing;Training;Multi-Valued Neuron (MVN);classifier;l-periodic;negative example;periodic activation function},
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6840067&isnumber=6840030>
- V. M. Lupea, "Multi-Valued Neuron with a periodic activation function — New learning strategy," *Intelligent Computer Communication and Processing (ICCP), 2012 IEEE International Conference on*, Cluj-Napoca, 2012, pp. 79-82.
doi: 10.1109/ICCP.2012.6356164
keywords: {learning (artificial intelligence);neural nets;MVN-P;learning algorithms;learning strategy;multivalued neurons;nonlinear multithreshold problems;periodic activation function;Artificial neural networks;Biological neural networks;Guidelines;Iris;Machine learning;Neurons;Zirconium;Multi-Valued Neuron (MVN);Neural Network (NN);activation function;learning strategy},
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6356164&isnumber=6356140>
- V. M. Lupea, "Multi-Valued Neuron with a periodic activation function - as part of a multi-layered Neural Network," *Applied Machine Intelligence and Informatics (SAMI), 2013 IEEE 11th International Symposium on*, Herl'any, 2013, pp. 121-124.
doi: 10.1109/SAMI.2013.6480958
keywords: {backpropagation;multilayer perceptrons;MVN-P;backpropagation correction;feedforward NN;multilayered neural network;multivalued neuron;nonlinear multithreshold problem;periodic activation function;Architecture;Artificial neural networks;Biological neural networks;Computer architecture;Machine learning;Neurons;Multi-Valued Neuron (MVN);Neural Network (NN);back-propagation;periodic activation},
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6480958&isnumber=6480936>
- V. M. Lupea, "Multi-valued neuron with a periodic activation function — Influence of l-periodic parameter over the learning process," *Computational Intelligence and Informatics (CINTI), 2013 IEEE 14th International Symposium on*, Budapest, 2013, pp. 185-188.
doi: 10.1109/CINTI.2013.6705189
keywords: {error statistics;learning (artificial intelligence);transfer functions;MVN-P;error rate;l-periodic occurrence;l-periodicity parameter;learning efficiency;learning epochs;learning process;multivalued neuron;periodic activation function;Biological neural networks;Computational intelligence;Conferences;Distance measurement;Materials;Neurons;Zirconium;Multi-Valued Neuron (MVN);l-periodic;periodic activation function},
URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6705189&isnumber=6705159>