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| Europass  Curriculum Vitae | |  | | | | | | | | | | | | | | | | | |
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| Personal information | |  | | | | | | | | | | | | | | | | | |
| First name(s) / Surname(s) | | Marilena Cancel | | | | | | | | | | | | | | | | | |
| Address | | 28, Godfrey Close, Leamington Spa, CV311UH (UK) | | | | | | | | | | | | | | | | | |
| Mobile | | +44 7763 459182 | | | | |  | | | | | | | | | | | | |
| E-mail(s) | | marilena.cancel@gmail.com | | | | | | | | | | | | | | | | | |
| Nationality | | Romanian | | | | | | | | | | | | | | | | | |
| Date of birth | | 25 November 1981 | | | | | | | | | | | | | | | | | |
| Gender  Social status | | Female  Married with two children | | | | | | | | | | | | | | | | | |
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| Desired employment / Occupational field | | Controls Engineer / Systems Engineer | | | | | | | | | | | | | | | | | |
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| Work experience | |  | | | | | | | | | | | | | | | | | |
| Dates | | August 2016 - present | | | | | | | | | | | | | | | | | |
| Occupation or position held  Main activities and responsibilities  r | | **Controls Engineer – Advanced Powertrain Technologies**   1. **Project**: Developed the control strategy for a 2.0 TGDI VVL Miller engine Variable Compression Ratio System (VCRS)   **Scope**: improve engine performance and reduce CO2 emissions by controlling the compression ratio function of the engine operating point, using an adjustable length (hydraulically controlled) connection rod.  **Activities**:  Take this design from desktop to hardware by using code generation as part of the RPC (Rapid Control Protoyping) concept   * model based design of the control algorithm (Simulink/Stateflow) * perform a feasibility study by simulating the function model, without using any physical parts * automatic C code generation (Embedded Coder) * software flashing on the prototype control module (MotoHawk) via CAN interface (Kvaser USB to CAN adapter) * function validation and verification on test bench (engine HIL rig) * software and documentation generation and tracking (Tortoise SVN)   This system improves engine performance (power, fuel economy, emissions and NVH).  **Hardware and Software tools used**: Matlab Simulink + MotoHawk toolbox, Stateflow, Embedded Coder, Woodward MotoHawk module, Woodward MotoTune tool, CANalyzer, ETAS INCA + CAN Transmit AddOn   1. **Project**: Developed the control strategy for a 1.5L gasoline engine Exhaust Heat Recovery System (EHRS)   **Scope**: improve the existing fuel economy and CO2 levels by reducing the engine warm-up time, using an exhaust valve and an additional engine coolant heater.  **Activities**:  Control of an electric motor driven exhaust flap fitted as part of an EHR System   * model based design of the control algorithm (Matlab Simulink/Stateflow) based on functional requirements * function implementation using rapid prototyping software * automatic code generation, flash the code on ES910 rapid prototyping control module * hardware interface configuration (ETAS ES930 Multi I/O module) * function verification, tuning and validation on test bench and on vehicle * FMEA support * test procedure, calibration guidelines and test report   **Hardware and Software tools used**: Matlab Simulink, Simulink Coder, ETAS ES910, ES930, INTECRIO, INCA, MDA  **EMS Systems Integration and Diagnostics Engineer**  **Project**: Systems Integration and Validation of Stop/Start system and Starter control on new MG vehicle programmes  Delivered Stop/Start system validation status on different programmes. Issues like low battery voltage, insufficient brake vacuum, door switch or catalyst heating could have an impact on stop/start system operation so I had to make sure that system works as expected in all testing conditions. Correct system operation provides fuel consumption improvement and exhaust emissions compliant to OBD standards.  **Activities**:   * Testing system operation and interaction with other systems against technical specification * Function specification update for new vehicle programmes * Function calibration update for new vehicle programmes * Test report generation * Create templates for test procedure and test report   In order to improve validation process, I’ve developed a test procedure to cover all the relevant test cases and default calibration for specific functions in order to get the expected results in the vehicle and then to be carried over on future programmes | | | | | | | | | | | | | | | | | |
| Name and address of employer r  Type of business or sector | | **SAIC Motor Technical Centre**, Lowhill Lane, Birmingham, West Midlands, UK  Automotive Engineering | | | | | | | | | | | | | | | | | |
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| Dates  Occupation or position held  Main activities and responsibilities x  Name and address of employer x  Type of business or sector | | May 2014 – August 2016  **Senior Systems Integration Engineer**  Stop/Start System validation engineer on Jaguar Land Rover vehicle programmes   * Review and update system requirements (IBM Doors) * Vehicle preparation support (INCA SW and calibration flashing, CANalyzer setup) * Dataset management (AVL Creta) * Team coordination (task split, progress tracking, weekly review) * Perform testing, data process and deliver test reports (RMDV, Webtop) * Follow up any issues with appropriate team (Powertrain, Stability Control System, ABS, Power supply, HMI, Cruise Control, Cabin climate, etc) * Raise conformance plan if validation test cannot be completed by required gateway * Provide launch support for each programme until Start of Production + 90days   “Stop On the Move” and “Stop in Gear” benchmarking lead engineer   * Test specification definition * Team coordination for testing, data logging and post processing * Performance Evaluation and Drivability * Deliver test reports   EMC validation on Bentley BEV Mulsanne   * Development of EMC test plan for EV - ECU level together with the electronic equipment owners   **Ricardo**, Southam Rd, Royal Leamington Spa, CV31 1FQ, UK  Engineering and Strategic consultancy | | | | | | | | | | | | | | | | | |
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| Dates  Occupation or position held  Main activities and responsibilities | | September 2012 → April 2014 (1 year and 8 months)  **Electromagnetic Compatibility (EMC) Project Engineer**  Management of EMC validation process of electronic equipment exclusively used in new Renault vehicles (ICE and EV) and and vehicle overall validation:  Main responsibilities:   * Develop EMC test plan at ECU and vehicle level with the supplier and the component development responsible * Manage and approve EMC validation requests on vehicles * Perform EMC test report analysis and give advice for issues on ECU and vehicle level * Define and monitor actions needed if any issue occurs during development phases * Coordinate EMC team’s activity   Test reports checked against EMC standards (Regulation No.10, CISPR 25, ISO 7637, ISO 11451, ISO 11452 ) | | | | | | | | | | | | | | | | | |
| Dates | | August 2010 → August 2012 (2 years and 1 month) | | | | | | | | | | | | | | | | | |
| Occupation or position held | | **Engine Management System Diagnosis Specialist** | | | | | | | | | | | | | | | | | |
| Main activities and responsibilities | | Deliver diagnostics databases development, integration, validation and documentation for Renault’s Diesel and gasoline engine projects:   * Development and validation of the diagnosis database for the engine management system * Update and corrections of the diagnosis data identifiers and diagnostic trouble codes in order to be compliant with the SAE and ISO standards (J1939, ISO14229, ISO15765-3, ISO11898) and after-sales diagnosis tools | | | | | | | | | | | | | | | | | |
| Dates | | June 2008 - July 2010 (2 years and 2 months) | | | | | | | | | | | | | | | | | |
| Occupation or position held | | **Function Integration and Validation Engineer** | | | | | | | | | | | | | | | | | |
| Main activities and responsibilities | | Perform integration, validation and calibration management for diesel engine control software (deployment on the series vehicles).   * Design of test procedure and calibration methods for engine control functions * Integration and validation of diagnostic specifications (OBD homologation test, actuator test) | | | | | | | | | | | | | | | | | |
| Dates | | October 2007 - May 2008 | | | | | | | | | | | | | | | | | |
| Occupation or position held | | **Systems Integration Engineer** | | | | | | | | | | | | | | | | | |
| Main activities and responsibilities | | Diesel engine control module system integrator   * Software integration and validation tests for different functions (CAN communication, diagnosis on CAN, diesel particulate filter regeneration) * Test bench project ECU configuration (software version, preliminary calibrations, experiment setup) * Test bench software tools configuration | | | | | | | | | | | | | | | | | |
| Name and address of employer  Type of business or sector | | **Renault Technologie Roumanie**, NG Business Centre, 2/III Pipera-Tunari Road,Voluntari, Romania  Automotive Engineering | | | | | | | | | | | | | | | | | |
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| Dates | | September 2006 – September 2007 | | | | | | | | | | | | | | | | | |
| Occupation or position held | | **Function Developer** | | | | | | | | | | | | | | | | | |
| Main activities and responsibilities | | Control system development for diesel engines applications   * Feasibility analysis of the customer requirements regarding engine control algorithms * Integration of the engine control functions, using simulation tools (Matlab/Simulink) or textual algorithm * Test the related embedded C code of the control function on hardware environments using dedicated test tools * Responsible with the function development for the vehicle communication protocols and diagnosis (communication via CAN network, diagnosis services and variant coding implementation/diagnosis) | | | | | | | | | | | | | | | | | |
| Name and address of employer  Type of business or sector | | **Siemens VDO Automotive**, 1 Calea Martirilor, 300724 Timisoara (Romania)  Automotive Engineering | | | | | | | | | | | | | | | | | |
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| Education | |  | | | | | | | | | | | | | | | | | |
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| Dates | | October 2005 - July 2006 (1 year) | | | | | | | | | | | | | | | | | |
| Title of qualification awarded | | **Master of Science** | | | | | | | | | | | | | | | | | |
| Principal subjects / occupational skills covered | | Systems with Microcontrollers | | | | | | | | | | | | | | | | | |
| Name and type of organisation providing education and training | | University "Politehnica" of Timisoara (Technical University)  2 / Piata Victoriei, 300006 Timisoara (Romania) | | | | | | | | | | | | | | | | | |
|  | |  | | | | | | | | | | | | | | | | | |
| Dates | | October 2000 - July 2005 (5 years) | | | | | | | | | | | | | | | | | |
| Title of qualification awarded | | **Bachelor of Science** | | | | | | | | | | | | | | | | | |
| Principal subjects / occupational skills covered | | Electrical engineering  Metrology and Measurement | | | | | | | | | | | | | | | | | |
| Name and type of organisation providing education and training | | University "Politehnica" of Bucharest (Technical University)  313 / Splaiul Independentei,, 060042 Bucharest (Romania) | | | | | | | | | | | | | | | | | |
| **Training courses** | | 2018: MotoHawk control workshop (Embedded software , Rapid prototyping) with embed  2018: Matlab Powertrain Blockset seminar  2017: SMTC, ETAS ASCMO, INTECRIO training  March 2017: Implementation of Automotive Control systems – one week course at Cranfield University  2016: ISO26262 – HARA workshop with Vector  2016: edx.org, “Leadership for engineers” course  2014: RMDV, AIMS, CRETA training at Jaguar Land Rover  2014:High Voltage awareness training course at Ricardo  2014: Driver training - Ricardo  2012: Electromagnetic Compatibility standards, testing and test report analysis - Renault  2009: Driver training - Renault  2008: Modelling and simulation internal tool (AGS) - Renault  2004: Matlab, Simulink, Stateflow Training | | | | | | | | | | | | | | | | | |
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| Personal skills and competences | |  | | | | | | | | | | | | | | | | | |
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| Mother tongue(s) | | Romanian | | | | | | | | | | | | | | | | | |
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| Other language(s) | |  | | | | | | | | | | | | | | | | | |
| Self-assessment | |  | Understanding | | | | | | | Speaking | | | | | | | Writing | | |
| European level (\*) | |  | Listening | | Reading | | | | Spoken interaction | | | | Spoken production | | |  | | | |
| English | |  | B2 | Independent user | | B2 | | Independent user | | | B2 | Independent user | | B2 | Independent user | | | B2 | Independent user |
| French | |  | B2 | Independent user | | B2 | | Independent user | | | B2 | Independent user | | B2 | Independent user | | | B2 | Independent user |
|  | | (\*) [Common European Framework of Reference (CEF) level](http://europass.cedefop.europa.eu/LanguageSelfAssessmentGrid/en) | | | | | | | | | | | | | | | | | |
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| Social skills and competences | | * Sociable, positive attitude * Team spirit * Good inter-personnel skills | | | | | | | | | | | | | | | | | |
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| Organisational skills and competences | | * Organized * Project team coordination * Trainer (for the new colleagues) | | | | | | | | | | | | | | | | | |
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| Technical skills and competences | | * More than 12 years of automotive engineering experience * Good knowledge of engine management systems * Good knowledge of automotive communication protocols * Good knowledge of OBD and after sales diagnosis * Good knowledge of EMC testing in automotive field * Good knowledge of Rapid Control prototyping software and process | | | | | | | | | | | | | | | | | |
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| Computer skills and competences | | * ECU Testing software (INCA, CANalyzer, ControlDesk, Labcar, Trace32) * Model based design and simulation with Matlab/Simulink/Stateflow * Rapid prototyping tools (INTECRIO, INCA+EIP Add-On) * Microsoft Office software (Word, Excel, Powerpoint, Outlook) * Electronics * TortoiseSVN Version control software | | | | | | | | | | | | | | | | | |
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| Driving licence(s) | | B | | | | | | | | | | | | | | | | | |
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