

## Dan OCNASU, PhD. Engineer

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**Project Management Skills**  
**Automotive and Power Systems Proficiencies**  
**Real-Time Simulation Specialist**

### Work Experience

Name and address of employer	 Jaguar Land Rover Banbury Road, Gaydon, CV35 0RR, United Kingdom
Type of business or sector	Vehicle design, development, manufacturing and sale (over 20,000 employees)
Occupation or position held	<b>Platform HIL (Hardware-In-the-Loop) Lead Engineer</b> <b>11/2015 – present</b>
Main activities and responsibilities	<p>Gathering system and feature level <b>requirements</b> to cascade into HIL rig capability. Formulating and improving the rig development and usage process. <b>Leading</b> a 3 persons team in charge of the development and maintenance of 2 vehicle level HIL validation rigs.</p> <p>Developing a <b>collaborative</b> work platform (SharePoint) for activity optimization and control (trace). Creating and implementing an <b>issues tracking</b> tool and process.</p> <p>Defining and publishing representative <b>KPIs</b> to drive the efficient delivery of vehicle level HIL validation activity.</p>
Name and address of employer	 S.C. Renault Technologies Roumanie S.R.L. (RTR) 2/III Sos. Piera-Tunari, Voluntari, Judetul Ilfov, Romania
Type of business or sector	Automotive Research and Engineering (2000 employees)
Occupation or position held	<b>Systems Engineering Leader</b> <b>10/2014 – 10/2015</b>
Main activities and responsibilities	<p><b>Coordinating</b> a 9 persons requirements-based system validation team. Converting half of the activity in contracting-in <b>work package</b> formalism (writing supplier requirements and supervising contractor's operations).</p> <p>Designing and implementing new process and standards for multi-site/multi-stakeholder activity standardization.</p>
Occupation or position held	<b>Power-train HIL (Hardware-In-the-Loop) Project Leader</b> <b>02/2013 – 09/2014</b>
Main activities and responsibilities	<p><b>Managing</b> the powertrain software <b>validation process</b> over the entire HIL environment lifecycle. Identifying, creating and implementing <b>process improvements and quality check tools</b>. Assuring the interface for all new test facility (<b>unique contact</b>). Managing the projects in time, cost and delay for entire Renault Group.</p> <p><b>Increasing the test facility profitability</b> by identifying new applications and clients, or by developing the night and weekend use. Priority/availability conflicts <b>mediation</b>.</p>
Occupation or position held	<b>Power-train HIL (Hardware-In-the-Loop) Specialist</b> <b>10/2008 – 01/2013</b>
Main activities and responsibilities	<p>Developing <b>HIL environments</b> for power-train control software validation, including modelling, hardware specification, development and execution of <b>automatic tests</b>. <b>Managing</b> each development as a <b>standalone project</b> (input data analysis, roadmap planning, resource and risk management). Problem <b>investigation</b> and <b>quality checks</b>. Designing and deploying <b>technical training</b> sessions in 3 different languages.</p> <p>Contributing to the <b>development of a new team</b>. Participation to complex <b>activity transfer</b> from France to Romania. Internal <b>process and procedures</b> conception, optimisation and implementation, for overall activity amelioration (reduction of production costs and delays, improvement of product and service quality).</p>
Name and address of employer	 G2Elab (Grenoble Electrical Engineering Laboratory) 916 Avenue de la Houille Blanche, 38402 Saint-Martin-d'Hères Cedex, France
Type of business or sector	Research, Training and Education in Electrical Engineering (300 employees)
Occupation or position held	<b>Research Engineer</b> (master of science and PhD) <b>10/2004 – 09/2008</b>
Main activities and responsibilities	<p><b>Developing and implementing</b> a facility based on a real-time HIL simulator, designed for research, training, demonstrations and industrial device testing. <b>Validating</b> the conceived simulator. Communicating the results and conclusions by reports, presentations and publications - 4 <b>articles</b> in technical reviews (ex. IEEE Transactions on Power Systems) or conferences.</p> <p><b>Teamwork</b> with other specialists in order to enlarge the applicability area of the conceived simulator. <b>Evaluating</b> a new simulator, followed by <b>technical exchanges</b> with supplier (Montreal, Canada).</p> <p><b>Supervising</b> and guiding several trainees. Several hours of <b>teaching</b> at university and master of science level. Participating at <b>industrial research project</b> "MULTISOL": optimal power flow control in a photovoltaic building, in cooperation with educational and industrial partners.</p>

## Education and Training

Name of organisation providing education	UJF (Université Joseph Fourier) Grenoble, France	
Title awarded	<b>Doctorate</b> (PhD) in "Electronics, Electricity , Automations, Signal Processing"	<b>10/2005 – 09/2008</b>
Principal subjects/skills covered	power systems; real-time HIL simulation; renewable power sources; power electronics (modelling, control and simulation)	
Name of organisation providing education	INPG (Institut National Polytechnique de Grenoble) Grenoble, France	
Title awarded	<b>Master of Science</b> in "Electronics, Electricity , Automations, Signal Processing"	<b>10/2004 – 07/2005</b>
Principal subjects/skills covered	power systems; real-time HIL simulation; wind energy; power electronics	
Name of organisation providing education	UPB ("Politehnica" University of Bucharest), Energy Faculty, Power Systems specialisation Bucharest, Romania	
Title awarded	<b>Engineer</b> Diploma in Electrical Engineering	<b>10/1999 – 09/2004</b>
Principal subjects/skills covered	power systems; superconductors; optimisation; design and control; protection and automation systems; final project prepared during a 5 months training course in France	

## Personal Skills and Competences

Foreign languages	<b>English</b> - Advanced <b>French</b> - Advanced <b>Spanish</b> - Beginner <b>Romanian</b> - Mother <b>TFI</b> ( <i>Test de Français International</i> ): <b>920</b> points (from 1000), ETS Global France, July 2010
Social skills and competences	<b>Teamwork</b> with colleagues heaving different level of experience. Work experience in <b>cross-functional</b> team environment and in an <b>international</b> and <b>multi-cultural</b> organization, gained in France, Canada, Romania and United Kingdom.
Organisational skills and competences	Good <b>self-organizational</b> abilities, acquired through training courses and work activity. <b>Project management knowledge</b> , acquired both by training and activity. <b>Managerial</b> skills, gained by the supervision and guidance of trainees and by trainings. Complex <b>systems analysis</b> , structuring and optimisation, proficiencies developed in industrial environment. <b>Reporting and presentation</b> competences, achieved by carrying out technical reports, presentations, posters and other technical papers. <b>Communication</b> skills developed by encountering suppliers, clients and partners, or by participating at technical seminars. <b>Results-orientation</b> and <b>decision-making</b> skills obtained through participation to industrial research project MULTISOL and during the industrial activity.
Technical skills and competences	<b>Modelling</b> physical systems; <b>design, making and manipulation</b> of complex multi-physical real-time environments. Abilities developed during the conception, realisation and usage of hybrid (analog/digital) benchmarks, at G2ELab and Renault Technologies Roumanie. Accurate and reliable <b>system analysis</b> . Competences acquired during the validation and usage of the above mentioned platforms, and during the evaluation period of a new real-time digital simulator. Proficiencies in electrical <b>security conditions</b> analysis, resulting from the necessity of realizing safe facilities. Empowered (APAVE, France) to perform measurements and tests in low voltage utilities.
Computer skills and competences	<b>Simulation</b> – Matlab/Simulink, dSPACE, ControlDesk, RT-LAB, TestDrive, AMESIM, ARENE, Mathcad; <b>Programming basics</b> - C languages, Matlab, Python; <b>Diagnostic and calibration automotive tools</b> - INCA, CANAllyzer, etc.; <b>MS Office</b> - Word, Power Point, Excel, SharePoint, Access, Visio, Project.

## Centres of Interest

<b>Nature and portrait photography</b> – for the composition and for "capturing the right moment" <b>Snowboarding</b> – for the dynamism and the self-control <b>Basket-ball</b> – for the team spirit and for the precision
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