

Europass Curriculum Vitae



Personal information

First name(s) /
Surname(s) Iulia Maria PRODAN

Address(es)

Telephone(s)

E-mail iulia-maria.prodan@unitbv.ro

Nationality Romanian

Date of birth 05.03.1990

Gender Female

Desired employment / Occupational field

Work experience

Dates January 2016 – present day

Occupation or position held Software Quality Assurance Engineer

Main activities and responsibilities

- development and maintenance of software quality control tests for LMS and Siemens PLM Software specific CAE products: VirtualLab and NX-Simcenter in Windows and Linux platforms.
- planning, designing and creating new test plans according to the design requirements and functional specifications for testing;
- creation of C ++ and Python scripts for automatic self-test execution
- flexible body specialist inside the Motion quality department (Nastran NX ans MSC, Ansys and Abaqus)
- technical leader for Motion NX-Simcenter quality
- active member of an Agile team

Name and address of employer Siemens Industry Software S.R.L
Bd. Garii nr13A, Brasov 500203 romania tel: +40(268)310101

Type of business or sector Software development

Dates June 2015 – January 2016

Occupation or position held FEA Engineer

Main activities and responsibilities

- Meshing of car interior components for Maserati, Land Rover and BMW and conducting static and dynamic simulations using Hypermesh for preprocessing, Abaqus and LS-Dyna for processing and Hyperview for postprocessing
- Analysing the results and elaborating technical reports

Conducting optimisation tests

Name and address of employer DTR Draexlmaier Sisteme Tehnice Romania S.R.L
DE 301-305 Ghimbav Street, Brasov ROMANIA tel: 0268 507200

Type of business or sector Automotive

Dates October 2013 – May 2015

Occupation or position held FEA Engineer

Main activities and responsibilities	On site at Renault Technologies Romania: <ul style="list-style-type: none"> - conducting crash test analysis on Renault, Dacia and Nissan autovehicles using Ansa, Pam Crash and Meta software - types of analysis carried on: frontal, rear, lateral, pole, pedestrian. - analysing and interpreting the results - occasionally performing defeaturing and meshing on new parts and integrating them into the car model
Name and address of employer	S.C. Segula Technologies Romania S.R.L 26-28 Stirbei Voda street, 010113. Sector 1, Bucharest ROMANIA tel: 021 312 3974
Type of business or sector	Automotive
Dates	April 2012 – July 2013
Occupation or position held	Internship
Main activities and responsibilities	<ul style="list-style-type: none"> - Catia V5 R19 modeling and assembly of Bensen B8 gyrocopter components following technical drawings and gaining the status of quality checker for this project - Designing in the same program of a wing structure for attaching missiles to the fuselage and conducting a study of the interference between the main rotor and the missiles launched through finite element analysis using Hypermesh, respectively Radioss solver, for the IAR 330 Puma helicopter - Completion of the structure course for the Airbus family organised by the company <p>Collaboration in a project involving finite element analysis of vehicle components in Hypermesh, respectively Radioss solver</p>
Name and address of employer	S.C. NUARB S.R.L Str.Calea Feldioarei nr.75C, Braşov Ro-500483, tel: +40-268-310 864 fax: +40-268-310 864
Type of business or sector	Aerospace
Education and training	
Dates	2016 – present day
Title of qualification awarded	Phd in Mechanical Engineering Faculty of Mechanical Engineering Thesis domain: "Impact energy absorption control using innovative lightweight structures "
Principal subjects/occupational skills covered	<ul style="list-style-type: none"> - lightweight composite sandwich structures - damage mechanics of low velocity impacts - low velocity impact testing rigs, signal acquisition
Name and type of organisation providing education and training	Transilvania' University of Brasov, Faculty of Mechanical Engineering, Brasov, Romania
Level in national or international classification	ISCED 8
Dates	2013 – 2015
Title of qualification awarded	Master's degree in aerospace engineering Faculty of Aerospace Engineering Area of expertise: Aerospace Propulsion and Environmental Protection
Principal subjects/occupational skills covered	<ul style="list-style-type: none"> - advanced mathematics - advanced physics - computational aerodynamics - transient processes in propulsion systems - propellers and wind turbines
Name and type of organisation providing education and training	'Politehnica' University of Bucharest, Faculty of Aerospace Engineering, Bucharest, Romania
Level in national or international classification	ISCED 7
Dates	2009 - 2013

Title of qualification awarded | Batchelor's degree in aerospace engineering
Faculty of Technological Engineering and Industrial Management
Area of expertise: Aerospace Engineering

Principal subjects/occupational skills covered | - mathematics, physics and fluid mechanics
- machinery, aircraft mechanics and aerodynamics
- understanding technical drawings and knowledge of 3D infographics (Catia V5R19, R21 including: Part Design, Assembly Design, Generative Sheet metal design, Drafting, Generative Shape Design; Solidworks 2012, AutoCAD 2007-2010)
- understanding strength of materials and finite element analysis using Abaqus
- knowledge of MS Office (2003-2012)
- knowledge of Mathcad and MathLab

Name and type of organisation providing education and training | 'Transilvania' University of Brasov, Faculty of Technological Engineering and Industrial Management, Brasov, Romania

Level in national or international classification | ISCED 6

Personal skills and competences

Mother tongue(s) | Romanian

Other language(s)

Self-assessment European level (*)	Understanding				Speaking				Writing	
	Listening		Reading		Spoken Interaction		Spoken Production			
English	C2	Proficient User	C2	Proficient User	C1	Advanced User	C1	Advanced User	C1	Advanced User
German	A2	Basic User	A2	Basic User	A1	Basic User	A1	Basic User	A1	Basic User
Greek	B2	Independent user	B2	Independent User	A2	Basic User	A2	Basic User	A2	Basic User

(*) [Common European Framework of Reference for Languages](#)

Technical skills and competences | Mechanical Engineering, Aerospace Engineering, Computer Science Fundamentals, Software Testing, CAE, CAD.

Computer skills and competences | Basic computer operating and programming knowledge (Pascal, C++) testified by a "Computer Operating Knowledge" certificate (2009) and more advanced skills developed during the last 6 years.

Driving licence | B Category

Additional information | Certified by the NUARB Training Academy that I have attended the customized training: Aircraft Lightweight Structures Stress Analyst, basic level, held in Brasov, Romania.
Awarded at the student scientific sessions conducted by the Faculty of Technological Engineering and Industrial Management:
- 2nd prize, 2013 with the paper "Designing a research rocket and a Nano satellite. Mission: Placing the Nano satellite on Earth's low orbit "
- 1st prize in 2012 with "Applications of smart materials for energy recovery"
Awards at the National Modern Greek Language Olympics:
- 3rd prize, in 2006 , level B

Published papers:

1. I. M. Prodan, S. Lache, A. I. Berariu "Numerical modelling and design exploration of a novel sandwich structure designed for low velocity impact", *materialstoday:Proceedings*, Vol. 45, Part 5, 2021, Pages 4117-4121, 8th International Conference on Advanced Materials and Structures - AMS 2020, Timisoara, Romania DOI: <https://doi.org/10.1016/j.matpr.2020.11.833>
2. Prodan, I.M., Berariu, A.I. „Generator de urgență acționat manual pentru pasagerii aeronavelor de linie/ Emergency passenger aircraft manual – powered generator”, *Creativity and Innovation Journal Revista Creativitate și Inovare/ ISSN (print) 2537-5997/ ISSN (online) 2559-4524*.
3. A. I. Berariu, I. M. Prodan, C. I. Nita, S. Gorobievschi, T. Deaconescu "Cutting dynamics sample generator for artificial neural networks based on design space exploration and explicit simulation synergy", *materialstoday:Proceedings*, Vol. 45, Part 5, 2021, Pages 4189-4195, 8th International Conference on Advanced Materials and Structures - AMS 2020, Timisoara, Romania DOI: <https://doi.org/10.1016/j.matpr.2020.12.040>
4. A. I. Berariu, I. M. Prodan, C. I. Nita, S. Gorobievschi, T. Deaconescu "Tool Wear Evaluation Based on Design Space Exploration Coupled with Explicit Cutting Simulations and Cutting Forces Excitation Signature", *RECENT J.* (2020), 61:060-066, Brasov, Romania DOI: <https://doi.org/10.31926/RECENT.2020.61.060>
5. A. I. Berariu, I. M. Prodan, C. I. Nita, S. Gorobievschi, T. Deaconescu "ANN Samples Generation Using 2D Dynamic FEM for Predicting Machining Vibrations", *Acoustics and Vibration of Mechanical Structures—AVMS 2019*. Springer Proceedings in Physics, vol 251. Springer, Cham., Timisoara, Romania DOI: https://doi.org/10.1007/978-3-030-54136-1_39
6. Ionescu, R.M., Husar C., Martinescu M., Prodan I., *Vibro-Acoustic Simulation Approach for Single Phase Permanent Split Capacitor Motor Noise*, Joint International Conference OPTIM_ACEMP, Braşov, Romania, 25-27 May 2017, Proceeding ISI IEEE Xplore