

Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **Adrian-loan LIȚĂ**
Location Bucharest / Romania
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Nationality Romanian
Gender Male



Work experience

Dates	04 October 2021 → now
Occupation or position held	Senior System Engineer
Main activities and responsibilities	Developing functionality into the Vartos operating system: <ul style="list-style-type: none">- Research and implementation from bare-metal of server operating system functionality- Fast, optimized string processing functions for the standard library- Highly optimized HTTP server and REST processor in C
Name and address of employer	Vartos SRL – remote contract / www.vartos.io 9-9A, Dimitrie Pompei Bvd., 3 rd floor, Bucharest (Romania)
Type of business or sector	Engineering

Dates	01 July 2020 → now
Occupation or position held	Senior Software and Telecommunications Engineer
Main activities and responsibilities	Developing NETCONF and YANG applications: <ul style="list-style-type: none">- NETCONF terminal simulator (ntsim-ng)- Implementing NETCONF capabilities to various equipment- Areas of expertise: C/C++, libyang, sysrepo, netopeer, scripting, Docker, Docker-compose
Name and address of employer	Highstreet technologies GmbH – remote contract / www.highstreet-technologies.com Hähnelstraße 6, Berlin (Deutschland)
Type of business or sector	Engineering

Dates	March 2015 → now
Occupation or position held	CEO / Senior Embedded Architect
Main activities and responsibilities	<ul style="list-style-type: none">- Managing privately owned company- Developing embedded operating system kernel (eTitan)- Industrial product design and development- Contracting and managing 3rd party developers, setting up milestones and tasks
Name and address of employer	AXIPlus Engineering / www.axiplus.com / www.axi.plus Splaiul Unirii, Bucharest (Romania)
Type of business or sector	Engineering

Dates	December 2013 → now
Occupation or position held	Vice president of Vanguard Technology NGO

Main activities and responsibilities	- member of the permanent council - website maintenance - various partnerships and collaboration - research activity: board design, system architecture
Name and address of employer	Vanguard Technology NGO / www.vanguard-technology.org
Type of business or sector	Volunteering, NGO, Engineering
Dates	14 November 2017 → 07 June 2021
Occupation or position held	Senior II Applications Engineer
Main activities and responsibilities	Develop apps with Microchip parts in Microchip's Mixed Signal and Linear Division. - getting new ideas out - defining and developing new projects in the ADC-area, firmware and hardware - defining developing and updating new products (IC) for current sensing applications - coordinating a team of 3 which is responsible to build demo applications and customer support on parts including ADCs, DACs, DigiPots and general firmware. - leadership passage P1 implementation - building concept demos for workshops
Name and address of employer	Microchip Technology Romania / www.microchip.com 4E, Vasile Milea Bvd, 3 rd & 4 th Floors, Bucharest (Romania)
Type of business or sector	Engineering
Dates	24 February 2014 → 30 September 2019
Occupation or position held	Research and Teaching Assistant
Main activities and responsibilities	Teaching: 1. Computer programming (C) 2. Data structures and algorithms lab (C/C++) (linked lists, double linked lists, stacks, queues, binary search trees, AVL trees) 3. Object-oriented programming lab (C++) 4. Medical Imagery Analysis and Processing (various size-wise alterations, contrast enhancements, histeq, edge detection, segmentation, etc) 5. Optimization technologies in programming
Name and address of employer	POLITEHNICA University of Bucharest / www.upb.ro 1-3, Iuliu Maniu Bvd, Bucharest (Romania)
Type of business or sector	Research, Academic
Dates	16 November 2013 → 14 November 2017
Occupation or position held	Senior Embedded Software Engineer
Main activities and responsibilities	Embedded programming and schematic design of DC-DC and AC-DC switched mode power supplies. Worked on projects such as wireless power, USB3.1 adapter, high density PFC, and topologies: Buck, Boost, LLC, bridge-less PFC and Flyback. Programming on STM32 (ARM) and dsPIC, in C and assembly.
Name and address of employer	Rompower Energy Systems / www.rompower.com 36 Henri Coanda Street, Bucharest (Romania)
Type of business or sector	Research and Engineering
Dates	1 March 2012 → 15 November 2013
Occupation or position held	MCU16 Applications Engineer
Main activities and responsibilities	Motor Control: BLDC motors, ACIM motors, stepper motors, high speed BLDC motors. Also developed: high speed isolated USB-UART communication circuit, low-power SMPS circuit using Microchip MCP16301 part, dual motor development board (signal board and part of power board), various motor control PIMs, technical documentation, marketing analysis. Between January 2013 and June 2013 I have voluntarily coordinated one student for his bachelor

thesis, helping him with some of the electronic circuits implemented on the car, and discussing possible algorithm implementations (project: Autonomous Vehicle Command Algorithm).

Name and address of employer **Microchip Technology Romania / www.microchip.com**
4E, Vasile Milea Bvd, 3rd & 4th Floors, Bucharest (Romania)

Type of business or sector Engineering

Dates 23 September 2011 → 1 March 2012

Occupation or position held **HPMD Applications Intern Engineer**

Main activities and responsibilities Motor Control: BLDC motors, ACIM motors, stepper motors, high speed BLDC motors

Name and address of employer **Microchip Technology Romania / www.microchip.com**
4A Vasile Milea Bvd, 6th Floor, Bucharest (Romania)

Type of business or sector Engineering

Dates 15 July 2011 → 02 September 2011

Occupation or position held **Collaborating Student, Researcher**

Main activities and responsibilities Simulating, testing and upgrading of ESS (Evasive Steering Support) for BMW and Mercedes.

Name and address of employer **Universität der Bundeswehr München, prof. Werner WOLF**
D-85577 Neubiberg (Deutschland)

Type of business or sector Research

Dates 16 May 2011 → 7 July 2011

Occupation or position held **Collaborating Student**

Main activities and responsibilities Part of a team who had the task of implementing a proprietary speech recognition algorithm for Romanian language on embedded Linux using ARM processor.

Name and address of employer **POLITEHNICA University of Bucharest, prof. Corneliu BURILEANU**
1-3 Iuliu Maniu Bvd, Bucharest (Romania)

Type of business or sector Research

Dates 01 January 2011 → 14 May 2011

Occupation or position held **Tutor coordinator in MINERVA Project**

Main activities and responsibilities - over 12 teams of 4-5 students in coordination
- responsibility to teach and guide each team to design a microcontroller (PIC) project

Name and address of employer **POLITEHNICA University of Bucharest, CETTI, prof. Paul SVASTA**
1-3 Iuliu Maniu Bvd, Bucharest (Romania)

Type of business or sector Academic coordination and research

Dates 05 July 2010 → 18 July 2010

Occupation or position held **Collaborating Student**

Main activities and responsibilities - specialized practice for students
- image acquisition and processing
- build RS-232 controllable toy car

Name and address of employer **POLITEHNICA University of Bucharest, prof. Ovidiu GRIGORE**
1-3 Iuliu Maniu Bvd, Bucharest (Romania)

Type of business or sector Research

Dates November 2009 → June 2010

Occupation or position held **Vice president of Electronics Engineering Students' League (LSE.org.ro)**

Main activities and responsibilities - project and human resources management
- maintaining a strong connection between LSE and faculty's executive board

Name and address of employer **Electronics Engineering Students' League**
1-3 Iuliu Maniu Bvd, Bucharest (Romania)

Type of business or sector	Volunteering, NGO
Dates	October 2009 → October 2010
Occupation or position held	Member of Faculty's Council
Main activities and responsibilities	- active participation in taking decisions - representing students' interests
Name and address of employer	Electronics, Telecommunications and Information Technology Faculty 1-3 Iuliu Maniu Bvd, Bucharest (Romania)
Type of business or sector	Academic
Dates	October 2009 → October 2010
Occupation or position held	Member of POLITEHNICA University of Bucharest Senate
Main activities and responsibilities	- representing students' interests
Name and address of employer	POLITEHNICA University of Bucharest 313 Splaiul Independentei, 060042 Bucharest (Romania)
Type of business or sector	Academic
Dates	31 August 2009 → 11 September 2009
Occupation or position held	Collaborating Student
Main activities and responsibilities	- specialized practice for students - research in embedded technology and embedded programming (embedded Linux)
Name and address of employer	University of Pitesti Pitesti (Romania)
Type of business or sector	Research
Dates	06 July 2009 → 13 July 2009
Occupation or position held	Collaborating Student
Main activities and responsibilities	- specialized practice for students - data acquisition and data processing of medical and bio signals
Name and address of employer	POLITEHNICA University of Bucharest, prof. Mihaela UNGUREANU 1-3 Iuliu Maniu Bvd, Bucharest (Romania)
Type of business or sector	Research
Dates	01 March 2009 → 01 June 2009
Occupation or position held	Collaborating Student
Main activities and responsibilities	- research regarding electrical solder joints (both electrical and mechanical functions of soldering)
Name and address of employer	CETTI, POLITEHNICA University of Bucharest, prof. Paul SVASTA 1-3 Iuliu Maniu Bvd, Bucharest (Romania)
Type of business or sector	Research

Education and training

Dates	October 2014 → now
Title of qualification awarded	PhD, Automated Control Systems
Principal subjects / occupational skills covered	Main studies include: control loops, magnetoresistive circuits, machine learning, fuzzy logic
Name and type of organisation providing education and training	POLITEHNICA University of Bucharest 1-3 Iuliu Maniu Bvd, Bucharest (Romania)
Dates	October 2012 → now
Title of qualification awarded	Master, International Affairs

Principal subjects / occupational skills covered	Main studies include: International Affairs Management, Business Communication, Marketing, International business environment, Ethics, Negotiation, Foreign markets, Fundraising in international business context, Operations on foreign capital markets, etc Master thesis:
Name and type of organisation providing education and training	Bucharest Academy of Economical Studies 6 Piata Romana, Bucharest (Romania)
Dates	October 2012 → July 2014
Title of qualification awarded	Master of Science in Advanced Integrated Technologies in Automotive Engineering (10 out of 10)
Principal subjects / occupational skills covered	Main studies include: CAD (Thermal and Electrical simulation, PCB design), Automotive Electronics, Optoelectronics, Automotive Chemistry Master thesis: Four temperature zones efficient climate control automotive system - HVAC
Name and type of organisation providing education and training	POLITEHNICA University of Bucharest 1-3 Iuliu Maniu Bvd, Bucharest (Romania)
Dates	October 2008 → July 2012
Title of qualification awarded	Bachelor of Science in Electronics Engineering: Applied Electronics (10 out of 10)
Principal subjects / occupational skills covered	Main studies include: Algebra, Electronic Measurements, Object-Oriented Programming, Data Structures and Algorithms, Data Acquisition, Television, Telecommunications, Integrated Circuits, FPGA Programming, etc. Secondary studies include Communication and Macroeconomics. Bachelor thesis: 3-dimensional multiprocessor flight system with 6 vertical propellers
Name and type of organisation providing education and training	POLITEHNICA University of Bucharest 1-3 Iuliu Maniu Bvd, Bucharest (Romania)
Dates	September 2004 → July 2008
Title of qualification awarded	Romanian Baccalaureate: 9.77 out of 10 (Advanced Mathematics: 98%; Informatics: 99%; English Language Oral: 100%; Romanian Language Oral: 100%; Romanian Language: 89%; Sports: 100%)
Principal subjects / occupational skills covered	Mathematics, Physics, Computing, Logic, Chemistry, Biology, Romanian, English, French, Economy, Psychology, Philosophy, History, Geography, Music, Drawing, Religion, Management
Name and type of organisation providing education and training	"Zinca Golescu" National College (Theoretical College) Pitesti (Romania)

Personal skills and competences

Mother tongue(s) **Romanian**

Other language(s)

Self-assessment
European level ()*

English

German

French

	Understanding		Speaking		Writing	
	Listening	Reading	Spoken interaction	Spoken production		
English	C1 Proficient user	C1 Proficient user	C1 Proficient user	C1 Proficient user	C1 Proficient user	C1 Proficient user
German	B1 Independent user	B1 Independent user	B1 Independent user	B1 Independent user	B1 Independent user	B1 Independent user
French	B1 Independent user	A2 Basic user	A2 Basic User	A2 Basic User	A2 Basic User	A2 Basic user

(*) [Common European Framework of Reference \(CEF\) level](#)

Social skills and competences

- team spirit gained during lots of camps, team-buildings, and from participating in several NGOs activities and projects;
- Good ability to adapt to multicultural environments achieved by a very communicative and open-minded attitude;
- Very cheerful person with a realistic/optimistic vision

- In my second year as a student, I have been the main tutor of the younger (first year) students (about 500 students)
- In my third year as a student, I have lead 12 teams of 4-5 students each in understanding microcontrollers' basic functions and passive components purpose (Minerva Project)
- I've been teaching programming to more than 1000 students while working as a teaching assistant for Politehnica University of Bucharest

Organisational skills and competences

- 3 years of volunteering in the Electronics Engineering Students' League, with 2 years being in the management committee (1 year vice president, and 1 year member of the council)
- leadership training
- experience in managing teams
- very good experience in team or project coordination and management, being coordinator/manager in many projects done while being a student

Technical skills and competences

- C developer guru
- ARM / dsPIC / PIC32 / Linux
- operating systems / RTOS
- Machine Learning / AI
- prototypes (hand built)

Computer skills and competences

- very experienced in: C, Assembly, Altium, Python, MATLAB (scripting and SimuLink)
- used to: C#, PHP, MySQL

Other skills and competences

Hobbies: music, electronic projects, car and airplane models
Sports: kitesurfing, ski, bike, tennis

Driving licence(s) B (since 2007), A (since 2019)

Additional information

Books:

- Energy Harvesting and Energy Efficiency – ISBN: 978-3-319-49875-1 (eBook) 978-3-319-49874-4 (Print) – Springer
- Guidelines for computer use, 2007 - ISBN: 978-973-755-280-8 – Matrix Rom

Articles:

- **Over 30 articles, see <https://adrian.lita.me/articles.html> or ResearchGate under my name.**

Courses taken over time: (full list/certificates on <https://adrian.lita.me/cv.html> - Other Education)

- **Tensorflow in practice Specialization**, Coursera, Dec 2019
 - o Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning
 - o Convolutional Neural Networks in TensorFlow
 - o Natural Language Processing in TensorFlow
 - o Sequences, Time Series and Prediction
- **Mathematics for Machine Learning Specialization**, Coursera/Imperial College London, Oct 2019
 - o Linear Algebra
 - o Multivariate Calculus
 - o PCA
- **Deep Learning Specialization**, Coursera/deeplearning.ai, Sept 2019
 - o Neural Networks and Deep Learning
 - o Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization
 - o Structuring Machine Learning Projects
 - o Convolutional Neural Networks
 - o Sequence Models
- **Applied Data Science with Python Specialization**, Coursera/University of Michigan, Aug 2019
 - o Introduction to Data Science in Python

- Applied Plotting, Charting & Data Representation in Python
- Applied Machine Learning in Python
- Applied Text Mining in Python
- Applied Social Network Analysis in Python
- **Leadership Training**, Leaders Foundation Romania, December 2009
- **Communication Training**, Ministry of Youth and Sports, Ministry of Education, Research and Innovation, and Ministry of Labour, September 2009
- **Cisco Certified Network Associate (CCNA - 4 modules)**, University of Pitesti, 2004