



## Europass Curriculum Vitae

### Personal information

Surname(s) / First name(s)

Telephone(s)

Email(s)

Nationality(-ies)

Date of birth

**Purdea Andrei**

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Hungarian

25.10.1987

### Work Experience

- Dates
  - Name and address of employer
  - Occupation or position held
  - Main activities and responsibilities
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- Dates
  - Name and address of employer
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July 2007 - August 2007

Siemens VDO Automotive SRL

Calea Martirilor 1989, no.1 300724 Timișoara  
România

Summer Internship, Officially: Ajutor Programator  
[Help of Programmer]

Develop XSLT code snippets that will generate C  
source code from XML templates

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July 2007 - present

RentACoder - Exhedra Solutions Inc.

1209 La Brad Lane; Tampa, Florida 33613; United  
State of America

Freelancer - Programmer

This is an organization providing efficient means  
for freelancer programmers to find jobs. I  
completed a few 'Small' and 'Medium Business  
Projects', and many 'Very Small Business  
Projects'.

## Education And Training

- Dates 2002-2006
- Name and type of organization providing education and training Bartók Béla High School - Mathematics- Informatics Division
- Title of qualification awarded Graduate, Atestat - informatics

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- Dates 2006 - 2010
- Name and type of organization providing education and training "Politehnica" University of Timișoara - Calculatoare și Tehnologia Informației
- Title of qualification awarded Engineer

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- Dates 2010 - present
- Name and type of organization providing education and training "Politehnica" University of Timișoara - Master's in Computer Engineering
- Title of qualification awarded I am currently a student

## Personal Skills And Competences

- Mother Tongue Hungarian
- Other Languages
- Reading skills English
  - Writing skills Excellent
  - Verbal skills Good
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- Reading skills Romanian
  - Writing skills Good
  - Verbal skills Good

## Social Skills And Competences

- Intercultural skills: I am experienced at working with overseas customers with more or less English knowledge

## Tehchnical Skills And Competences

VHDL	I have been introduced to this language at my university, as my first Hardware Description language
Verilog	Learned it by reading the Language Reference Manual
Z80 assembler	I used it to write software to some low-cost chinese mp3 players currently available, that had a z80 compatible instruction set. I also successfully completed a reverse engineering project of a Z80-based embedded system on RentACoder. I also extended a Z80 emulator, to emulate all the hardware of the project I was reverse engineering, to ease my understanding of the software. I worked only from the binary image, schematics, and user documentation describing the software. I had no hardware at hand.
Reverse engineering an Oscilloscope	Digital oscilloscope, connected to a computer via USB, containing an FPGA, memory, and fast A/D converters. I used JTAG boundary scan to find de connections between the pins of the memory, and the FPGA.
PCB design	I have some limited skills of PCB design. Mainly from experience from mostly one-layered personal projects
VLSI design	I was the only one in my class to get a 10+10 at the ADO of VLSI course+project
Python	I learned this programming language by myself - I am experienced with Python I use it for personal needs almost every day
Django	I learned this web framework by myself
CSS, HTML, Javascript, PHP, and other Standard web tehnologies	I also learned these by myself, and I am experienced because I use these tehnologies on a daily basis
OpenGL graphics	I have developed a simple 3d chess application

Microcontrollers	I have worked with the Atmel ATMEGA series, with ARM7TDMI, MSP430, Blackfin(BF537), Cypress EZ-USB FX2 (8051-compatible core), ATJ2085/2097 (z80-compatible core). I have also worked with the following FPGA cores: Nios II, and Microblaze, Integrated powerPC (using Xilinx Platform Studio)
Mobile platforms	I have not completed and published a project yet, but I am familiar with the basics of programming on the Android platform. I have a half-complete flashlight application for my Android phone. Also I adventured into the emulator touch screen emulation code, implementing some patches for the support of multi-touch in the emulator. (The low-level parts are done, only the interface is not ready yet)
Other Programming Languages	I am an advanced Linux user, and administrator Java, C, Shell scripts, Delphi (Pascal, Lazarus), SystemC, Ioke, Ruby, Emacs Lisp, Prolog and I am always open to learning new technologies
SCMs	SVN, CVS, GIT

### Contests and Achievements

2010	ACM-ICPC (Association for Computing Machinery - International Collegiate Programming Contest) - Regional contest - Honorable Mention
2010	The "Alexandru Rogojan" programming contest - Organized every year at the Politehnica University of Timișoara - I won the 1st place
2010	ACM-ICPC (Association for Computing Machinery - International Collegiate Programming Contest) - Local contest - Me and my team won the 1st place
2010	ITEC (iT Engineering Contest) - BitDefender contest - 3rd place
2009	The "Alexandru Rogojan" programming contest - Organized every year at the Politehnica University of Timișoara - I won the 3rd place
2009	ACM-ICPC (Association for Computing Machinery - International Collegiate Programming Contest) - Regional contest - Honorable Mention

- 2009 ITEC (iT Engineering Contest) - A hardware contest, the continuation of CEC. The task was to connect hexapod robots to an FPGA board and to make software for them to walk, and avoid obstacles. My team and I won the first place
- 2008 CEC (Computer Engineering Contest) - A hardware design contest, organized for the first time at the Politehnica University of Timișoara. The task was to implement and to optimize a multiplier on an FPGA development board. My team and I won the first place.
- 2008 The "Alexandru Rogoian" programming contest - Organized every year at the Politehnica university of Timișoara - I won the 2nd place
- 2008 ACM-ICPC (Association for Computing Machinery - International Collegiate Programming Contest) - Regional contest - Honorable Mention
- 2007 SCSS - Student Scientific Communication Session - I developed a musical instrument tuner written in Z80 assembly, for my cheap chinese mp3 player.
- 2006 Informatics Olympics - county level - Honorable Mention nr.2
- 2006 Informatics Contest "Nemes Tihamér" international - Budapest - 14th place
- 2006 Informatics Contest "Nemes Tihamér", organized at a level of several counties in the region called Transilvania - 2nd prize
- 2006 International Math Contest "Székely Mikó", transilvania level - 2th place, I participated at the international contest too in Serbia
- 2006 Software contest "Noi Info" - I developed a chess playing program, with 3d opengl graphics.
- 2005 International math contest "TMMATE", organized in Timișoara, România, 1st edition - 4th place
- 2005 Software contest "Noi Info" - Special Prize: I developed a Geiger Müller Counter with an atmega8 microcontroller - It has been presented at the "Circle of principles" at the West University of Timișoara, faculty of Chemistry, Biology, Geography, and it has been published in a book later in 2007.
- 2005 Informatics Olympics, county level - 3rd prize

- 2005 Math Olympics, county level - Honorable Mention
- 2004 Informatics Contest "Nemes Tihamér", international informatics contest, Budapest - 24th place
- 2004 Informatics Contest "Nemes Tihamér", transilvania level - 2th prize
- 2004 Physics contest "Vermes Miklós" - organized at a level of several counties in the region called Transilvania - Honorable Mention
- 2003 Informatics Olympics, county level - 2nd prize - and I also participated at the national level in Focsani
- 2003 Physics Olympics - county level - 3rd price

### **Additional Information**

#### Publications

Published in 2007 - Cercul Principiilor Vol. I. - Editura Universității de Vest - the article "Măsurarea Radioactivității Cu Contorul Geiger Müller" - written in 2005 - page 105-114 - ISBN 978-973-125-077-9

#### Personal Interests

Playing the Guitar, Social Ballroom Dancing