europass Curriculum Vitae

PERSONAL INFORMATION	Maria-Elena Mihăilescu

📍 National University of Science and Technology POLITEHNICA Bucharest

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WORK EXPERIENCE

14 Nov 2019 – Present

Teaching Assistant
Faculty of Automatic Control and Computer Science, University POLITEHNICA of Bucharest, Romania

Teaching laboratories for the following classes: Introduction in Operating Systems, Operating System Concepts and Security in Cluster and Grid Environment

1 January 2023 - Present

Researcher at RoNaQCI
Romanian National Quantum Communication Infrastructure (RoNaQCI)

Infrastructure management operations for UPB

July 2022 - Present
May 2020 – Dec 2021

Responsible for software development at CONDEGRID
National contribution to the development of the LCG Computing Grid for Elementary Particle Physics

Cluster and Grid operations for UPB's infrastructure; improvements for the middleware software of the ALICE (A Large Ion Collider Experiment) Grid from CERN.

Aug 2019 – May 2022

Researcher at SIMARGL
SIMARGL (Secure Intelligent Methods for Advanced Recognition of Malware and Stegomalware) aims to detect network and file malware and stegomalware.

Deployed the infrastructure for testing, executed network attacks

Jun 2019 – Jul 2019
Jun 2018 – Jul 2018

Associate Trainer at Security Summer School
Faculty of Automatic Control and Computer Science, University POLITEHNICA of Bucharest, Romania

▪ Responsible for session content development, training, and logistics.

Sept 2017 – Jun 2019

Master's degree Student Research
FreeBSD-UPB, https://github.com/FreeBSD-UPB/freebsd

▪ Improving FreeBSD's hypervisor's, bhyve, functionality. Some of the main project goals are to add a save and restore functionality and a live migration feature to bhyve. This is an ongoing project at University POLITEHNICA of Bucharest. I ported the Save and Restore mechanism for AMD CPU systems and I implemented warm and live migration support for bhyve.

Business or sector IT

Jul 2016 – Oct 2016

Intern – Software Engineering
Bitdefender, Bucharest, Romania, https://www.bitdefender.ro/

▪ Creating Python scripts for automatic testing company's products in order to test their specifications and discover functionality issues

Business or sector IT

EDUCATION AND TRAINING

Oct 2019 – present

PhD Student in Computer Science
Faculty of Automatic Control and Computer Science, University POLITEHNICA of Bucharest, Romania

March 2020 - June 2020

Pedagogic Training (Second Module)
Faculty of Automatic Control and Computer Science, University POLITEHNICA of Bucharest, Romania

Relevant Courses: Online Teaching Methods, Communication in Education, Psychopedagogy of adolescents, young people and adults, Design and management of educational programs

Developing lessons for university level classes and working with e-learning tools such as Moodle, Kahoot, Google Forms

Oct 2017 – Jun 2019

Master's Degree in Security of Complex Networks
Faculty of Automatic Control and Computer Science, University POLITEHNICA of Bucharest, Romania

Dissertation Thesis: Virtual Machine Migration for bhyve
Thesis Grade: 10/10; Overall Grade: 9.91/10

- Relevant Courses: Computers and Network Security, Security of Mobile Devices, Security of Information Systems, Privacy Enhancing Technologies, Start-up Engineering, Dedicated Solutions for Network Security, Mobile Computing, Network Security Audit, Cluster and Grid Computing

Jun 2017 – Jul 2017

Security Summer School
Faculty of Automatic Control and Computer Science, University POLITEHNICA of Bucharest, Romania

- Defence Mechanisms, Buffer Overflow Attacks, Return-to-libc Attacks, Return Oriented Programming Attacks, Fuzzing

Oct 2013 – Jul 2017

Bachelor's degree in Computer Science
Faculty of Automatic Control and Computer Science, University POLITEHNICA of Bucharest, Romania

Bachelor Thesis: DokuWiki to LaTeX Converter, Thesis Grade: 10/10, Overall Grade: 9.69/10

- Relevant Courses: Operating Systems Concepts, Operating Systems Internals, Compilers, Parallel Data Processing, Computer Networks, Embedded Systems, Communication Protocols, Assembly Languages, Parallel Processing and Architectures,

Oct 2013 – Jun 2016

Pedagogic Training (First Module)
Faculty of Automatic Control and Computer Science, University POLITEHNICA of Bucharest, Romania

- Relevant Courses: Class Management, Pedagogical Course, Education's Psychology
- Teaching lessons to 9th and 10th grade students at Tudor Vianu Highschool, Bucharest as part of the final evaluation

Sept 2009 – Jun 2013

Highschool Diploma
National Highschool College "I.L. Caragiale", Ploiești, Romania

- Baccalaureate Grade: 9.60/10

PERSONAL SKILLS

Mother tongue(s)   Romanian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B1	B2	B2	B2	B2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
Common European Framework of Reference for Languages

Communication skills

- good communication skills gained through my experience as associated teaching assistant
- good communication skills gained through my experience in a team

Job-related skills

- good in developing content for courses gained through my experience as a teaching assistant
- good in coordinating teams and students gained through the projects I worked in.
- good at organizing events gained through the conferences and events in which I participated in the organizing committee.

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Levels: Basic user - Independent user - Proficient user
Digital competences - Self-assessment grid

- good command of office suite (word processor, spread sheet, presentation software)
- good knowledge of open-source tools (git, SVN)
- good knowledge of operating systems (Linux and FreeBSD)
- good knowledge of markup languages (DokuWiki, Markdown)
- good knowledge of programming language (C, python, assembly, Java, bash)
- good knowledge of cloud solutions (OpenStack).

ADDITIONAL INFORMATION

Publications
Projects
Conferences
Certifications

Organized Events
  October 2022 - CERN Day @ UPB
    Part of the Organizing Committee, in charge with schedule, event related acquisitions (t-shirts, posters, etc.), event room

  2020 - Present - Hackathon SO (Hackathon for the Operating Systems class)
    Part of the Organizing Committee, in charge with schedule, hackathon tasks, solution, checker creation, event related acquisition (including prizes), assignment grading, helper for teams during the day
  June 2019 - July 2019, June 2018 - July 2018 - Mid and Final CTF for Security Summer School
    Part of the Organizing Committee, in charge with schedule, event related acquisition, helper for teams during the day
  September 2018 - EuroBSDCon 2018, Bucharest Romania
    Part of the Organizing Committee, in charge with registration, schedule, speaker's accommodations, conference related acquisitions (customized t-shirts, tote-bags, lanyards etc.)