

## PERSONAL INFORMATION

Florica Balog

JOB APPLIED FOR  
POSITION  
PREFERRED JOB  
STUDIES APPLIED FOR  
PERSONAL STATEMENT

Lecturer

## WORK EXPERIENCE

01.10.2020 – present

Invited associate lecturer

University of Oradea, Faculty of Informatics and Sciences, Department of Mathematics and Informatics, Romania

- Teaching activities covering the following:
  - informatics
  - advanced programming techniques
  - computer networks
  - the basics of programming

Business or sector University education

01.10.2018 – 17.12.2018

Lecturer

“Eftimie Murgu” University of Resita, Faculty of Engineering and Management, Department of Electrical Engineering and Informatics, Romania

- Teaching activities covering the following:
  - assisted design of electrical and electronic circuits
  - the basics of fuzzy logic
  - sensors and transducers
  - electrical and electronic measurements

Business or sector University education

19.02.2018 – 13.07.2018

Automation engineer

Electroechipament Industrial SRL, Resita, Romania

- CAD Activities

Business or sector Electric field

17.10.2016 – 22.08.2017

Software developer

Continental Automotive Romania, Timisoara, Romania

- Software development and software testing

Business or sector Automotive

01.10.2008 – 01.10.2016

Teaching assistant

“Eftimie Murgu” University of Resita, Faculty of Engineering and Management, Department of Electrical Engineering and Informatics, Romania

- Teaching activities covering the following:
  - structured programming
  - object oriented programming
  - web programming
  - operating systems
  - artificial intelligence

Business or sector University education

16.07.2008 – 26.09.2008

### Engineer

Hanna Instruments Romania, Nusfalau, Romania

- Research and development / PCBs of measurement and control instruments update by using Prolog

Business or sector Measurement and control instruments producer

## EDUCATION AND TRAINING

2010 - 2017

### PHD / Diploma of Doctor in Applied Engineering Sciences

Field: Computer Science and Information Technology

"Politehnica" University of Timișoara, Faculty of Automation and Computers, Timisoara, Romania

- Computer Science, Computation in science and engineering, High Performance Scientific Computing (Parallel Computing and Scientific Computing), Wind Energy

EQF

8

2009 - 2011

### Master / Diploma of Master

Field: Computer and Information Technology

Specialization: Information Technology

"Politehnica" University of Timișoara, Faculty of Automation and Computers, Timisoara, Romania

- Disciplines of computer science / Deepening knowledge of computer science field like:
  - Internet Technologies: ASP Net by using SQL Server Databases
  - Web Pages connected to MySQL Databases
  - Advanced Compilation Techniques
  - Testing the software applications

EQF

7

2003 - 2008

### Diplomat Engineer / Diploma of Engineer

Field: Applied Sciences

Specialization: Industrial Informatics

"Eftimie Murgu" University of Resita, Faculty of Engineering and Management

- Technical and information disciplines / Training as engineer

EQF

5

05.2007 – 07.2007

### Developer Training

Hella Romania, Timisoara, Romania

- Automotive Developer Training. Skills covered in:
  - Software Engineering
  - Embedded Systems
  - Microcontrollers
  - Embedded C
  - Testing

1999-2003

### High school / Diploma of Baccalaureate

Profile: Theoretical branch

Specialization: Mathematics and Computer, Computer Intensive

"Iuliu Maniu" Technical College, Simleu Silvaniei, Romania

- Theoretical disciplines of computer science / Average knowledge of computer programming

EQF

4

1991 - 1999

### Secondary school

Secondary school no. 2, Simleu Silvaniei, Romania

## PERSONAL SKILLS

Mother language(s)

Romanian

Other language(s)

UNDERSTANDING

SPEAKING

WRITING

	Listening	Reading	Spoken interaction	Spoken production	
French	B2	B2	B1	B1	B1
English	B1	B2	B1	B2	B2
Italian	B2	B2	B1	B1	B1

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

Communication skills	<ul style="list-style-type: none"> <li>good communication skills gained through my experience as university assistant</li> </ul>
Organisational / managerial skills	<ul style="list-style-type: none"> <li>good organizational skills acquired during my experience as a programmer and engineer</li> <li>adaptability to new situations and ideas</li> <li>ability to work in a team</li> <li>ability to work on projects</li> <li>ability to solve situations just learned in the professional field</li> </ul>
Job-related skills	<ul style="list-style-type: none"> <li>Virtual instrumentation: <ul style="list-style-type: none"> <li>transducers and sensors</li> <li>data acquisition and processing systems</li> </ul> </li> <li>Wind energy: <ul style="list-style-type: none"> <li>Control of wind systems through HPC functionality</li> </ul> </li> <li>High-performance scientific calculation: scientific calculation and parallel calculation: <ul style="list-style-type: none"> <li>Matlab</li> </ul> </li> <li>Structured and object oriented programming: <ul style="list-style-type: none"> <li>C, C++, and Embedded C</li> </ul> </li> <li>Web programming: <ul style="list-style-type: none"> <li>PHP and MySQL</li> </ul> </li> <li>Acquisition and data processing: <ul style="list-style-type: none"> <li>LabView</li> </ul> </li> <li>Artificial intelligence: <ul style="list-style-type: none"> <li>Prolog</li> </ul> </li> <li>Operating systems: <ul style="list-style-type: none"> <li>Windows, Linux</li> </ul> </li> <li>CAD: <ul style="list-style-type: none"> <li>Autocad</li> </ul> </li> <li>Software engineering skills: V Cycle model: <ul style="list-style-type: none"> <li>software requirements</li> <li>software design</li> <li>coding (programming)</li> <li>unit test</li> <li>integration tests</li> </ul> </li> </ul>

#### 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

#### Other computer skills:

- good command of office suite like MS Office and Open Office (word processor, spread sheet, presentation software)
- good command of photo editing software gained as an amateur photographer
- good command of VISIO software

Other skills Other relevant skills not already mentioned:

- Ability to set priorities
- Ability to assimilate information and knowledge update
- Waking
- Driving

Driving licence B

## ADDITIONAL INFORMATION

Publications Specialized scientific publications published in prestigious national and international journals such as:

Presentations

Projects

Conferences

Seminars

Honours and awards

Memberships

References

Citations

Courses

Certifications

- Horia Ciocarlie, Florica Balog, Gheza-Mihai Erdodi, Doru-Ionut Petrescu, "Peak Energy Determination by a Sample at Idle Mode Operation", 9th IEEE International Symposium on Applied Computational Intelligence and Informatics, Timișoara, Romania, May 15-17, 2014, 978-1-4799-4694-5/14, p295-298.
- Florica Balog, Horia Ciocarlie, Marius Babescu, Doru-Ionut Petrescu, "Maximizing the Captured Energy of the Wind System", 9th IEEE International Symposium on Applied Computational Intelligence and Informatics, Timișoara, Romania, May 15-17, 2014, 978-1-4799-4694-5/14, p289-293.
- Babescu, M.; Novacescu, F.; Ciocârlie, H., „The leading of the eolian power systems at speed of wind vary over time”, Computational Science and Computational Intelligence (CSCI), 2014 International Conference on, Las Vegas, NV, 10-13 March 2014, IEEE Explore Digital Library, Volume: 1/ DOI: [10.1109/CSCI.2014.70](https://doi.org/10.1109/CSCI.2014.70), Page(s): 368–373, 2014.
- FLORICA BALOG, HORIA CIOCARLIE, MARIUS BABESCU, GHEZA-MIHAI ERDODI, "The Dynamics of Wind System at the Optimum Load", BULETINUL INSTITUTULUI POLITEHNIC DIN IASI, Publicat de Universitatea Tehnică „Gheorghe Asachi” din Iasi, Tomul LX (LXIV), Fasc. 2, 2014, Sectia AUTOMATICĂ si CALCULATOARE, 2014.
- Horia Ciocarlie, Florica Balog, Gheza-Mihai Erdodi, Doru-Ionut Petrescu, "Behavior of the wind systems optimally controlled at variable wind speeds", Scopus, Advances in Intelligent Systems and Computing, Volume 357, Pages 1337-1351, 2016.
- Florica Balog, Horia Ciocarlie, Marius Babescu, Gheza-Mihai Erdodi, "Equivalent speed and equivalent power of the wind systems working at variable wind speed", Scopus, Advances in Intelligent Systems and Computing, Volume 357, Pages 1325-1336, 2016.
- Florica Balog, Horia Ciocarlie, "Development and Parallelization of a Direct Numerical Simulation in order to Study the Behavior of a Wind Systems Optimally Controlled at Variable Wind Speed", Wulfenia Journal, 2016.
- Florica Balog, Horia Ciocarlie, "Parallelization strategy of an explicit numerical analysis technique for a quad-parallel structure", Jokull Journal, Vol. 66, No. 3, Mar 2016.
- Florica Balog, Horia Ciocarlie, "Parallel Solving of The Wind System Control at Variable Wind Speed", INDIAN JOURNAL OF APPLIED RESEARCH, Volume: 5 | Issue: 6 | June 2015 | ISSN-2249-555X, Page(s): 301-305, 2015.
- Florica Balog, Schema de distributie a datelor in cazul simularilor numerice paralele de inalta performanta aplicata pentru controlul sistemelor eoliene la viteza variabila a vantului, Editura Politehnica, Timisoara, ISSN: 2069-8216, ISBN:978-606-35-0140-1, 2017.

## ANNEXES

List of documents annexed to CV:

- Copy of the engineering degree
- Copy of the master degree
- Copy of the doctorate degree
- Excerpt from Web of Science-WoS (ISI) -Thomson Reuters with published articles indexed
- Extracts from international databases (BDI) specific for the doctoral field, with published indexed articles (eg BDI: Scopus, IEEE Xplore, ScienceDirect, SpringerLink)