

## PERSONAL INFORMATION

## Florin Ioan ONIGA

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Sex M Nationality Romanian

## OCCUPATION FIELD

Higher Education

## ORGANIZATION

Technical University of Cluj-Napoca, Romania

## WORK EXPERIENCE

since Oct. 2020

**Professor**

Computer Science Department, Faculty of Automation and Computer Science, Technical University of Cluj-Napoca (TUC-N), [www.utcluj.ro](http://www.utcluj.ro)

2015-2020 Sept.

**Associate Professor** (TUC-N)

2012-2015

**Senior Lecturer** (TUC-N)

2001-2012

**Trainee research assistant / Teaching Assistant / Lecturer** (TUC-N)**Taught subjects** (selection, bachelor/master):

- Computer Architecture
- Basics of Computer Architecture
- Image Processing
- Pattern Recognition Systems

**Research topics:**

- Environment perception for driving assistance systems
- Stereovision, stereo matching, camera calibration
- Environment perception with digital elevation maps, road / obstacle detection
- Computer vision on mobile devices
- Lidar / vision based environment perception, semantic 3D obstacle detection
- Image processing for space surveillance

**EDUCATION AND TRAINING**

- 2012-2019 **Habilitation in Computer Science**  
 Technical University of Cluj-Napoca  
 ▪ Research subjects: 3D environment perception with vision and lidar sensors.
- 2002-2011 **PhD in Computer Science**  
 Technical University of Cluj-Napoca  
 ▪ Research subjects: driving environment perception using stereovision, for advanced driving assistance systems.
- 2002-2003 **Advanced Studies**  
 Computer Science, Technical University of Cluj-Napoca
- 1997-2002 **Diploma Engineer**  
 Computer Science, Technical University of Cluj-Napoca

**PERSONAL SKILLS**

Mother tongue Romanian

Other languages

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C1	C1	C1

**Communication skills** Good communication skills related to technology and education, acquired through

- 17 years of teaching experience
- 19 years of research experience, including participation in multiple conferences, workshops, professional visits, project consortium meetings, and negotiations with international partners.

**Organizational / managerial skills** Management skills, acquired through

- Involvement in project management activities for 12 years
- Management of three research projects
- Administrative / institutional activities.

**Job-related skills**

- Design of lidar and vision based perception systems
- Design of image acquisition systems, understanding the operation of cameras and frame-grabbers, camera calibration for stereo and trinocular vision
- Mathematical modeling of real-life problems: modeling of the geometry of a stereovision system, modelling of the road surface, obstacles and curbs, for driving assistance applications, in terms of geometry and temporal evolution. Modeling the measurement and its uncertainty.

- Computer skills**    Advanced skills of:
- Computer programming (C/C++, Assembly, Java, MatLab)
  - Source code optimization for real-time performance, optimized for the target platform
  - Design and implementation of complex algorithms for image processing and shape recognition.

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**ADDITIONAL INFORMATION****Publications / visibility****Publications**

- 6 books / 1 book chapter
- 5 ISI journal papers
- 43 papers at international conferences (most indexed in Wos).

**Visibility**

- 1700+ citations in Google Scholar, h-index=20
- 1000+ citations in Scopus, h-index=16.

**Projects****Research projects**

- Involved in more than 22 research projects/grants as researcher/senior researcher, project responsible for 3 industry research grants (with an international company)
- Projects were international (with private automotive companies, Horizon 2020, EU FP7, and Celtic+) and national (with private companies and government funded grants).

14.09.2020

Assoc. Prof. Dr. Eng. Florin Oniga