

## Curriculum vitae

Conf. Dr. Habil. Darian M. ONCHIS

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### • EDUCATION

- 2014            Habilitation  
Aix-Marseille University, Marseille, France
- 2006            PhD  
Faculty of Mathematics and Computer Science/ West University of Timisoara/ Romania  
Department of Applied Mathematics I / University of Seville/ Spain
- 2004            Master  
Master of Science in Informatics (*Valedictorian*). Department of Computer Science/  
West University of Timisoara, Romania.

### • CURRENT POSITION

- 2016 - ongoing Associate Professor (faculty position)  
Department of Computer Science, West University of Timisoara, Romania

### • PREVIOUS POSITIONS

- 2015 - 2018    Senior researcher and Project Leader  
Faculty of Mathematics, University of Vienna, Austria
- 2014 - 2016    Full Professor of Industrial Informatics (faculty position)  
Department of Industrial Informatics, Eftimie Murgu University, Romania
- 2014            Senior researcher in the EU Project HOST (High Performance Computing Centre)  
West University of Timisoara, Romania
- 2007 - 2014    University Lecturer (faculty position)  
Department of Industrial Informatics, Eftimie Murgu University, Romania
- 2007 - 2013    Post-Doc Researcher  
NuHAG, Computational Science Platform, University of Vienna, Austria
- 2003 - 2007    University Assistant  
Department of Economics, Eftimie Murgu University, Romania
- 2001 - 2003    Software Engineering position  
SiemensVDO, Algorithms group, Timisoara, Romania

- **FELLOWSHIPS**

- 2013, 2014 Postdoctoral fellowship (3 months each year)  
Centre de Mathematiques et Informatique, Aix-Marseille University, France.
- 2005 - 2012 5 Mobility fellowships awarded by EU competition (1 and up to 3 months for 1 stage)  
HPC-Europa Project (High Performance Computing in EUROPE)
- 1998 - 2004 Merit scholarship, Faculty of Mathematics and Computer science, West University of Timisoara, Romania

- **SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL**

- 2017 - 2018 1 postdoc student at Faculty of Mathematics, University of Vienna, Austria
- 2015 - 2018 1 PhD student at Faculty of Mathematics, University of Vienna, Austria
- 2017 - 2017 4 Master students in Computer Science, West University of Timisoara, Romania

- **TEACHING ACTIVITIES**

- 2014 - 2016 Full Professor: Graphs theory and combinatorics, Algorithmic Design, Visual programming, Databases, Eftimie Murgu University, Romania.
- 2016-ongoing Associate professor: Machine learning, Algorithms and Data Structures, Bioinformatics, West University of Timisoara, Romania.

- **ORGANISATION OF SCIENTIFIC MEETINGS**

- 2017 Chair of DRILLS (Data Representation in Learning, Living Systems and Signals), international IEEE indexed workshop, 25 participants, Timisoara, Romania
- 2017 Organiser and Main Speaker at the Training and Research week on Topological and Harmonic Algorithms for Bio-Images and Sequences, University of Seville, Spain, 15 participants
- 2014 Chair of the 5<sup>th</sup> CTIC (Computational Topology in Image Context), international workshop series, 50 participants, Timisoara, Romania,
- 2013 Organizer of the special session M-FRAME CONSTRUCTIONS at the 9th ISAAC congress, Cracow, Poland, 35 participants
- 2011 Organisation of the first international summer school: A MATLAB approach to Computational Harmonic Analysis, Marburg, Germany, 25 participants.

- **COMMISSIONS OF TRUST**

**Technical program committee:** CAIP 2011 – 2017(Computer Analysis of Images and Patterns), EUSIPCO 2010 – 2018 (European Signal Processing Conference), CTIC 2014 – 2018 (Computational Topology in Image Context), SYNASC 2014 – 2017 (Symbolic and Numeric Algorithms for Scientific Computing).

**Reviewer Work:** Advances in Computational Mathematics, Signal Processing; IEEE Transactions on Signal Processing; Applied and Computational Mathematics; International Journal of Wavelets, Multiresolution and Information Processing (IJWMIP); IEEE Instrumentation and Measurements; IEEE Signal Processing Letters; Pattern Recognition Letters; Journal of Mathematical Imaging and Vision; International Referee for the NSF (National Science Foundation) of Bulgaria, for the 2008 and 2009 research calls

- **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

2017 - ongoing FOCM – Foundations of Computational Mathematics  
2011 - ongoing TOPREC – Topological pattern analysis and recognition  
2010 - ongoing EURASIP – European Association of Signal Processing

- **MAJOR COLLABORATIONS**

Prof. Bruno Torresani, Computational Harmonic Analysis, Aix-Marseille University, France  
Prof. Hans Feichtinger, Numerical Harmonical Analysis, University of Vienna, Austria  
Prof. Pedro Real, Computational topology, University of Seville, Spain  
Prof. Dana Petcu, Parallel computing, West University of Timisoara, Romania

- **RECENT SCIENTIFIC ACTIVITIES**

2017 CREAM Toolbox v1.0 was released. It includes MATLAB code in support of the research papers (e.g. Band limited case, Deformation to test continuity, Pseudo differential operator approximation, Standard Gabor and many more...).

2017 COST Action Proposal OC-2016-2-21631 "Tomography Across Modalities and Scales", about the emerging field of multi-scale, multi-modal techniques for tomographic imaging, was submitted to the COST Open Call OC-2016-2.

2016 Guest editor of the special issue Geometric, Topological and Harmonic Trends to Image Processing in the Elsevier journal Pattern Recognition Letters, Impact Factor 1.995

2014 Managing guest editor of the special issue Localization, diversity and uncertainty in signal representations in the Springer journal Advances in Computational Mathematics, Impact Factor 1.31

2014 Managing guest editor of the special issue Time-frequency methods for condition based maintenance and modal analysis" in the Elsevier journal Signal Processing, Impact Factor 3.110