

## INFORMAȚII PERSONALE

## Dana Elena Ghita (Ilea)



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Sexul Feminin | Data nașterii 06/05/1981 | Naționalitatea Romana

LOCUL DE MUNCA PENTRU  
CARE SE CANDIDEAZĂ

### UNIVERSITATEA TRANSILVANIA

## POZIȚIA

SEF LUCRARI, Dept. Inginerie Electrica si Fizica Aplicata (IEFA),  
Facultatea Inginerie Electrica si Stiinta Calculatoarelor (IESC)

## EXPERIENȚA PROFESIONALĂ

2018 - Prezent

Sef lucrari, Facultatea de Inginerie Electrica si Stiinta Calculatoarelor (IESC),  
Universitatea Transilvania, Brasov.

Pagina web: <https://iesc.unitbv.ro/ro/despre/inginerie-electric%C4%83-%C8%99i-fizic%C4%83-aplicat%C4%83.html>

#### Materii:

Programarea calculatoarelor și limbaje de programare I  
Programarea calculatoarelor și limbaje de programare II  
Programarea calculatoarelor și limbaje de programare III  
Electrotehnică și mașini electrice  
Instrumentatie asistata de calculator  
Grafică asistată de calculator

Cercetare in domeniul segmentarii si analizei imaginilor digitale.

Sectorul de activitate : Educatie si cercetare.

*Ghita*

- 2008 – 2012 Post-doctoral Researcher - Dublin City University (DCU), Centre for Image Processing and Analysis (CIPA), School of Electronic Engineering, Dublin, Ireland.  
Pagina web: [www.cipa.dcu.ie](http://www.cipa.dcu.ie).  
Researcher si membru al echipei in cadrul National Biophotonics and Imaging Platform Ireland (NBIPI) for Computer Aided Detection for Ultrasound Vascular Biology (a €30 million HEA-PRTL IV initiative).
- Dezvoltarea de modele matematice aplicate pentru detectarea bolilor cardiovasculare in imagini ecografice ale arterei carotide.
  - Dezvoltare metode de segmentare culoare-textura.
- Supervizare/conducere studenti doctorat in domeniul analizei si procesarilor de imagini medicale.  
Sectorul de activitate: Cercetare, dezvoltare, R&D, educatie.
- 03.2005 – 05.2005 Inginer training, Siemens, PSE, Brasov, Romania.

## EDUCAȚIE ȘI FORMARE

- 2005 – 2008 Doctorat (PhD) Nivelul EQF 8  
Computer Vision and Image Processing, Dublin City University (DCU), School of Electronic Engineering, Dublin, Ireland.
- 2000 - 2005 Inginer Dipl. (BEng)  
Facultatea de Inginerie Electrica si Stiinta Calculatoarelor, specializarea Inginerie Electrica si Calculatoare (in limba engleza), sef de promotie, Universitatea Transilvania, Brasov, Romania.
- 07.2003 – 09.2003 Summer Internships, Vision Systems Group, Dublin City University, Glasnevin, Dublin 9.  
07.2004 – 09.2004
- 1996 - 2000 Colegiul National Dr. Ioan Mesota, Brasov, Romania (sectia de matematica – fizica cu predare intensiv engleza).

## COMPETENTE PERSONALE

Limba(i) maternă(e) ROMANA

### Alte limbi străine cunoscute

|          | INTELEGERE |        | VORBIRE                    |              | SCRIERE |
|----------|------------|--------|----------------------------|--------------|---------|
|          | Ascultare  | Citire | Participare la conversație | Discurs oral |         |
| Engleza  | C2         | C2     | C2                         | C2           | C2      |
| Spaniola | B2         | B2     | B2                         | B2           | B2      |

Niveluri: A1/2: Utilizator elementar - B1/2: Utilizator independent - C1/2: Utilizator experimentat

Germana, Franceza (cunostiinte de baza)

**Competențe de comunicare** Foarte bune competente de comunicare scrisa si orala, precum si interpersonale formate in decursul carierei prin prezentarea rezultatelor cercetarii mele in cadrul conferintelor de specialitate internationale si nationale, congrese si seminarii.

Session chair:

- CIICT 2006 - China-Ireland International Conference on Information and Communications Technologies, Hangzhou, China, October 18 -19, 2006.

- VISAPP 2010, 5th International Conference on Computer Vision Theory and Applications (VISAPP 2010), May 17-21, 2010, Angers, France.

**Competențe organizaționale /manageriale**

Competente de project management obtinute in decursul carierei: organizarea si planificarea obiectivelor proiectelor, capacitatea de indeplinire a termenelor de realizare a obiectivelor, dezvoltarea si mentinerea legaturilor cu colaboratorii clinici, generarea rapoartelor de cercetare pentru agentile sponsor (NBIPI, SFI, Enterprise Ireland).

Competente de supervizare si coordonare proiecte la toate nivelurile de studiu.

Am fost membru al comisiei organizatorice IMVIP (IEEE International Irish Machine Vision and Image Processing) in 2006 si 2011.

**Competențe informatice**

Limbaje programare: C, C++, Matlab

Sisteme operare: Windows.

**Competente si indicatori ai performantei academice**

Numar jurnale publicate: 9

Numar lucrari publicate la conferinte internationale: 17

Numar total citatii (iunie 2021): 661

H-index: 9

**Alte competențe**

Reviewer pentru jurnale internationale in domeniu, printre care: IEEE Transactions on Medical Imaging; IEEE Transactions on Image Processing; Pattern Recognition; Pattern Recognition Letters, IEEE International Conference on Optimization of Electrical and Electronic Equipment (OPTIM), IEEE International Conference on Image Processing, IEEE International Irish Machine Vision and Image Processing (IMVIP) Conference.

**Permis de conducere**

B

## INFORMATII SUPLIMENTARE

### Publicatii Jurnale

- 1.Dana E. Ilea and Paul F. Whelan, "CTex - An Adaptive Unsupervised Segmentation Algorithm Based on Colour-Texture Coherence", IEEE Transactions on Image Processing (**Impact factor: 9.34**), vol. 17, no. 10, 2008.
- 2.Dana E. Ilea and Paul F. Whelan (2011), "Image Segmentation based on the Integration of Colour-Texture Descriptors - A Review", Pattern Recognition (**Impact factor: 7.19**), vol. 44, issues 10-11, October-November 2011, pp. 2479-2501. Stayed in the top 10 Hottest Pattern Recognition articles from January 2011 to December 2013.
- 3.Dana E. Ilea Ghita, Caoimhe Duffy, Liam Kavanagh, Alice Stanton and Paul F. Whelan (2013), "Fully Automated Segmentation and Tracking of the Intima Media Thickness in Ultrasound Video Sequences of the Common Carotid Artery", IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control (**Impact factor: 2.81**), vol. 60, no. 1, pp. 158-177, January 2013. [Also - Highly Cited Articles in IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control - January 2014 edition].
4. Ovidiu Ghita, Dana E. Ilea and Paul F. Whelan (2013), "Texture Enhanced Histogram Equalisation Using TV-L1 Image Decomposition", IEEE Transactions on Image Processing (**Impact factor: 9.34**), vol. 22, no. 8, 2013, pp 3133-3144.
5. C.M. Brown, C. Duffy, Dana E. Ilea, Paul F. Whelan, A.V. Stanton (2009), "Carotid artery stiffness is only one tenth that of aortic artery stiffness as assessed by pulse wave velocity", Journal of Human Hypertension (**Impact factor: 2.43**), vol. 23, no. 10, pp 698-699, 2009.

6. Ovidiu Ghita, Dana E. Ilea and Paul F. Whelan (2009), "Image feature enhancement based on the time-controlled total variation flow formulation", *Pattern Recognition Letters* (**Impact factor: 3.25**), vol. 30, issue 3, 2009, pp. 314-320.
7. Ovidiu Ghita, Dana E. Ilea and Paul F. Whelan (2012), "An Adaptive Noise Removal Approach for Restoration of Digital Images Corrupted by Multimodal Noise", *IET Image Processing* (**Impact factor: 1.99**), vol. 6, issue 8, pp 1148-1160, November 2012.
8. Ovidiu Ghita, Dana E. Ilea, Antonio Fernandez and Paul F. Whelan (2012), "Local binary patterns versus signal processing texture analysis: a study from a performance evaluation perspective", *Sensor Review* (**Impact factor: 1.44**), vol. 32 issue 2, pp. 149-162.
9. M. Lynch, Dana E. Ilea, K. Robinson, O. Ghita and Paul F. Whelan, "Automatic Seed Initialization for the Expectation-maximization Algorithm and its Application in 3D Medical Imaging", *Journal of Medical Engineering and Technology* (Impact factor: 0.95), vol. 31, no. 5, pp. 332 – 340, September/October 2007.

### Publicatii Conferinte, Prezantari (selectie)

1. Dana E. Ilea, Paul F. Whelan, Catherine Brown, and Alice Stanton (2009), "An Automatic 2D CAD Algorithm for the Segmentation of the IMT in Ultrasound Carotid Artery Images", 31st Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS 2009), September 2-6, 2009 Minnesota, USA.
2. Dana E. Ilea and Paul F. Whelan (2009), "Colour Saliency-Based Parameter Optimisation for Adaptive Colour Segmentation", IEEE International Conference on Image Processing (ICIP 2009), Cairo, Egypt November 7-11.
3. Dana E. Ilea and Paul F. Whelan, "Colour Image Segmentation Using a Spatial K-Means Clustering Algorithm", Proceedings of the IEEE Irish Machine Vision and Image Processing Conference (IMVIP 2006), pp. 146-153, Dublin City University, Ireland, 30 August – 1 September, 2006.
4. Dana E. Ilea and Paul F. Whelan, "Adaptive Pre-Filtering Techniques for Colour Image Analysis", Proceedings of the IEEE International Machine Vision and Image Processing Conference (IMVIP 2007), pp. 150-157, National University of Ireland, Maynooth, IEEE Computer Society Press, September 5 -7, 2007.
5. Dana E. Ilea and Paul F. Whelan, "Colour Image Segmentation Using a Self - Initialising EM Algorithm", Proceedings of the International Conference on Visualization, Imaging and Image Processing (VIIP 2006), Palma de Mallorca, Spain, August 28-30, 2006.
6. Dana E. Ilea and Paul F. Whelan, "Automatic Segmentation of Skin Cancer Images Using Adaptive Colour Clustering", Proceedings of the China-Ireland International Conference on Information and Communications Technologies (CICT 2006), pp. 348-351, Hangzhou, China, October 18 -19, 2006.
7. Dana E. Ilea, O. Ghita and Paul. F. Whelan, "Evaluation of Local Orientation for Texture Classification", Proceedings of the 3rd International Conference on Computer Vision Theory and Applications (VISAPP 2008), pp. 357-364, Funchal, Madeira – Portugal, January 22-25, 2008.
8. Dana E. Ilea, Paul F. Whelan and O. Ghita, "Performance Characterization of Clustering Algorithms for Colour Image Segmentation", Proceedings of the IEEE International Conference on Optimization of Electrical and Electronic Equipment (OPTIM 2006), May 18-19, 2006, Brasov, Romania.
9. Dana E. Ilea Ghita, Paul F. Whelan and Ovidiu Ghita (2010), "Unsupervised Image Segmentation Based On The Multi-Resolution Integration Of Adaptive Local Texture Descriptors", 5th International Conference on Computer Vision Theory and Applications (VISAPP 2010), May 17-21, 2010, Angers, France.
10. Dana E. Ilea, Paul F. Whelan, Catherine Brown and Alice Stanton (2010), "Automatic detection and measurement of the IMT in longitudinal sections of ultrasound images of the CCA, The European Congress of Radiology (ECR 2010), March 4-8, 2010, Vienna, Austria.
11. Dana E. Ilea, O. Ghita, K. Robinson, R. Sadleir, M. Lynch, D. Brennan and Paul F. Whelan (2004), "Identification of Body Fat Tissues in MRI Data", IEEE OPTIM 2004 – 9th International Conference On Optimization of Electrical and Electronic Equipment, May 20-21, 2004, Brasov, Romania.
12. Dana E. Ilea, O. Ghita, K. Robinson, M. Lynch, and Paul F. Whelan (2005) "A 3D CAD tool for body fat identification", Proceedings of 17th European Congress of Radiology (ECR 2005), March 4-8, 2005, Vienna, Austria.
13. Michele Peporte, Dana E. Ilea Ghita and Paul F. Whelan (2011), "A Hybrid Approach to Brain Extraction from Premature Infant MRI", Scandinavian Conference on Image Analysis (SCIA 2011), Ystad Saltsjobad, Sweden, May 23-27, 2011.
14. Michele Peporte, Dana E. Ilea, Eilish Twomey and Paul F. Whelan (2013), "White Matter Segmentation of Brain MRI during Infancy", BioPhotonics and Imaging Conference (BioPIC 2013), March 25-27, Castleknock Country Club, Dublin, Ireland.
15. Michele Peporte, Dana E. Ilea, Eilish Twomey and Paul F. Whelan (2011), "A morphological approach for infant brain segmentation in MRI data" Proceedings of the IEEE Irish Machine Vision and Image Processing Conference (IMVIP 2011), September 8-9, 2011, IEEE Computer Society.
16. C.M. Brown, C. Duffy, Dana E. Ilea, Paul F. Whelan, A.V. Stanton (2009), "Carotid artery stiffness is only one tenth that of aortic artery stiffness as assessed by pulse wave velocity", British Hypertension Society / Nurses Hypertension Association Annual Scientific Meetings, St. Johns College, Cambridge, September 14-16, 2009.
17. Ovidiu Ghita, Paul F. Whelan, Dana E. Ilea (2008), "Multi-resolution texture classification based on local image orientation", The International Conference on Image Analysis and Recognition (ICIAR 2008), Póvoa de Varzim, Portugal, July 25-27, 2008 , Proc. Lecture Notes in Computer Science (LCNS), vol. 5112, pp 688-696.

