

## INFORMAȚII PERSONALE Tabirca Tatiana Maria

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LOCUL DE MUNCA PENTRU CARE  
SE CANDIDEAZĂ  
POZIȚIA

Facultatea de Matematica si Informatica, Conferențiar, Poziția 36

## EXPERIENȚA PROFESIONALĂ

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|-----------|--|
| 2003-2006 | Cercetator / Researcher<br>University College Cork, Boole Centre for Research in Informatics <ul style="list-style-type: none"><li>▪ Activitati specifice de cercetare in diferite proiecte de cercetare</li><li>▪ Coordonare grup de cercetare in directia metode de schedulare in programarea paralela</li></ul>   |
| 2008-2010 | Cercetator / Researcher<br>University College Cork, Mobile and Internet System Lab <ul style="list-style-type: none"><li>▪ Activitati specifice de cercetare in diferite proiecte de cercetare</li><li>▪ Supervizare studenti master si doctorali</li><li>▪ Coordonare grup de cercetare in directia metode de optimizare a retelelor wireless</li></ul>                       |
| 2000-2003 | Cercetator / Research Student<br>Manchester University, Center for Novel Computing <ul style="list-style-type: none"><li>▪ Activitati specifice de cercetare in diferite proiecte de cercetare</li></ul>   |
| 1992-2000 | Asistent / Lector<br>Universitatea Transilvania Brasov, Facultatea de Matematica <ul style="list-style-type: none"><li>▪ Activitati specifice de cercetare</li><li>▪ Predare cursuri: Analiza numerica, Algoritmi si structuri de data, Algoritmi in Matematica, Metodica predarii informaticii</li><li>▪ Activitati de laborator si seminar la discipline multiple.</li></ul> |

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**EDUCAȚIE ȘI FORMARE**

2021-2022	MSc in Inteligenta Artificiala Technical University of Shannon, Ireland
2000-2003	MPhil in Computer Science Manchester University, England
1996-1999	Doctorat in. Matematica Aplicata Universitatea Babes-Bolyai Cluj Napoca
1985-1999	BSc in Informatica Universitatea Bucuresti Media de absolvire 9.53

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**PROIECTE DE CERCETARE**

Optimisation in WSN  
dynamic networks

MISL Lab, UCC

Rezultate importante:

1. Un model teoretic de siguranță dinamică pentru detectarea incendiilor rețelelor WSN.
2. Indici de importanță pentru optimizarea dinamică a rețelei.
3. Indici snapshot pentru rețea dinamică.
4. Acoperire minimă cu senzori în WSN.

6 articole publicate in conferinte sau jurnale internationale.

1. T. Tabirca, K. N. Brown and C. J. Sreenan, "A Dynamic Model for Fire Emergency Evacuation Based on Wireless Sensor Networks," *2009 Eighth International Symposium on Parallel and Distributed Computing*, 2009, pp. 29-36, doi: 10.1109/ISPDC.2009.33.
2. Zeng, Yuanyuan; Murphy, Seán Óg; Sitanayah, Lanny; Tabirca, Tatiana M.; Thuy T.; Brown, Kenneth N.; Sreenan, Cormac J, Building fire emergency detection and response using wireless sensor networks, *9<sup>th</sup> IT&T Conference*, 2009.
3. T. Tabirca, L.T. Yang, S. Tabirca, Fire hazard safety optimization, *Procedia computer science*, Elsevier Volume 51, 2015, Pages 2759-2763.
4. T. Tabirca, L.T. Yang, S. Tabirca, Smallest number of sensors for k-covering, Vol 8 No 2 (2013), *International Journal of Computers Communications & Control*.

5. Tatiana M. Tabirca · Kenneth N. Brown · Cormac J. Sreenan , Snapshot Centrality Indices in Dynamic FIFO Networks, Springer, J Math Model Algor (2011) 10:371–391.
6. Tatiana Tabirca, Laurence Yang, Sabin Tabirca, Centrality Indices Computation in Dynamic Networks, The 12th IEEE International Conference on Computer and Information Technology (CIT 2012), October 2012. Chengdu, Sichuan, China. Indexed in: DBLP, IEEE, ACM

## HPC Computing

CNC, Manchester Univ si BCRI,

UCC

## Rezultate Importante:

1. Noi algoritmi de programare pentru bucle dinamice ghidate de feedback
2. Studii teoretice pentru programarea FGDLs cu unele cazuri noi de convergență
3. Diverse aplicații ale FGDLs
4. 10 articole publicate in conferinte sau jurnale internationale.

1. T.Tabirca, S.Tabirca, L. Freeman, L.T. Yang (2003) An  $O(p+\log p)$  Algorithm for the Discrete FDGLS, Proceedings of The 2003 International Conference on Parallel Processing, ICPP-HPSECA 2003, Taiwan, pp. Indexed
2. T.Tabirca, S.Tabirca, L. Freeman, S.Tabirca, T. Yang (2003) Static Workload Balance Scheduling Algorithm; Continuous Case, Proceedings of The 17th International Parallel and Distributed Processing Symposium, IPDPS 2003, Nice, France.
3. T.Tabirca, L. Freeman, S.Tabirca, T. Yang, A Static Workload Balance Scheduling Algorithm, Proceedings of The 2<sup>nd</sup> Workshop on Parallel and Distributed Scientific and Engineering Computing with Applications (PDSECA 2001), San Francisco, USA.
4. T.Tabirca, S.Tabirca, L. Freeman, T. Yang, Feedback Guided Dynamic Loop Scheduling; A Theoretical Approach, Proceedings of The 3<sup>rd</sup> Workshop on High Performance Scientific and Engineering Computing with Applications (HPSECA 2001), 2001, Valencia, Spain.
5. T. Tabirca, S. Tabirca and L. T. Yang (2006) An  $O(\log p)$  Algorithm of the Discrete FGDLs Method, Proceedings of AINA 2006, April 2006, Viena, pp 321-326.
6. S.Tabirca, T.Tabirca, L.Yang (2005) Convergence of the Discrete FGDLs Algorithm, Proceedings of the 2005 International Conference on High Performance Computing and Communications, Naples, Italy, September 2005, LNCS , pp. 233-244.

7. S.Tabirca, T.Tabirca, L.Yang (2005) An Application of Feedback Guided Dynamic Loop Scheduling to the Shortest Path Problem revista:In Proceedings of the International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA02) , ed. H.R.Arabnia, CSREA Press, Bogart, Georgia.
8. S. Tabirca, T. Tabirca and L. T. Yang (2006) A convergence study of the discrete FGDL algorithm, IEICE Transactions on Information and Systems, 2006, vol. E89D, Nr.2, pp.673-678. (Selected from HPCC 2005).  
Indexed in: DBLP, ACM
9. S.Tabirca, T.Tabirca, L. Yang, L. Freeman (2006) Feedback Guided Dynamic Integral Partition, Proceedings of the 5th International Symposium on Parallel and Distributed Computing (ISPDC06), Timisoara, July, 2006, pp.  
Indexed in: DBLP, ACM, ISI, IEEE
10. S.Tabirca, T.Tabirca, L.T.Yang and L.Freeman (2004) Evaluation of Feedback Dynamic Loop Scheduling Algorithms, IEICE Trans. Inf & Syst., vol E87-D, no7, July 2004, pp. 1829-1833. Indexed in: DBLP, ISI