PERSONAL INFORMATION

Daniela Doroftei

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Sex F | Date of birth 21/04/1979 | Nationality Belgian + Romanian

WORK EXPERIENCE

2016 – present
Task-Leader, EU-H2020 Project SafeShore(http://safeshore.eu)

Royal Military Academy, Brussels, Belgium

- Responsible for the elaboration of user requirements, scenarios and target performance levels for maritime border security tools
- Responsible for the organisation of project conferences and workshops, contributor to the dissemination and exploitation of project results
- Responsible for the organization of a multi-system large-scale RPAS border infringement exercise to validate the detection system developed in the SafeShore project

Business or sector: Border Security/ Unmanned aerial vehicles

2012 – 2016
WP-Leader, EU-FP7 Project ICARUS (http://www.fp7-icarus.eu)

Royal Military Academy, Brussels, Belgium

- Responsible for the elaboration of user and system requirements for unmanned search and rescue tools
- Responsible for the technical coordination of the 125 people working on the project
- Responsible for the organisation of project conferences and workshops
- Co-organisator of a simulated large-scale intervention with search and rescue teams equipped with unmanned tools after an earthquake

Business or sector: Crisis and disaster management / Unmanned ground and aerial vehicles

2005 – present
Research Engineer

Royal Military Academy, Brussels, Belgium

- Development of hybrid behaviour-based control approaches, allowing human-in-the-loop semi-autonomous robot behaviours
- Development of decentralised multi-robot control strategies for robotic teams

Business or sector: Defence

2002 – 2003
Researcher

Université Libre de Bruxelles (ULB), Brussels, Belgium

- Numeric design and structural modelling of new membranes for active structures

Business or sector: University

EDUCATION AND TRAINING

2002 – 2003	**Master study (DEA) in Applied Science**

Université Libre de Bruxelles (ULB) in Brussels, Belgium

▪ Master thesis: Development of an elastic membrane for active vibration dampening

March 2001 - May 2001	**Erasmus scholarship**

Université Libre de Bruxelles (ULB) in Brussels, Belgium

1997 -2002	**Master in mechanical engineering**

Gheorghe Asachi University in Iasi, Romania

▪ Master thesis: Simulation of a PUMA manipulator

PERSONAL SKILLS

Mother tongue(s)   Romanian

Other language(s)

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
French				
C2	C2	C2	C1	B2
Dutch				
C1	C1	B2	B2	B1
English				
C1	C1	B2	B2	B2
Italian				
A2	A2	A1	A1	A1
Russian				
A1	A2	A1	A1	A1

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills
▪ good communication skills towards different actors gained through my experience as organiser of events

Organisational / managerial skills
▪ excellent time-keeping skills as responsible on this subject in the coordination team
▪ good time-management skills gained as end-responsible for the timely delivery of 6 project deliverables
▪ excellent event-organisation skills as main contact point for multiple international conferences
▪ good knowledge of administrative processes as liaison officer for handling administrative matters
▪ good knowledge on the elaboration of user and system requirements and system validation, as responsible on these subjects in the ICARUS and SafeShore projects

Computer skills
▪ good command of Microsoft Office™ tools (word processor, spread sheet, presentation software)
▪ knowledge of programming tools through past experiences in research projects

Driving licence
▪ B

PROJECTS

2016 – present	EU-H2020 project SafeShore on the development of a threat detection system for improving the maritime border security. Responsible for the user requirements definition and for the elaboration of the scenarios and target performance levels.
2012 – 2016	Large-scale integrating project "*ICARUS*" on the development of unmanned search and rescue tools (air, ground, marine), supported by the European Commission under the 7th Framework Programme, Responsible for the "user requirements" work –package and liaison officer towards the end-user board.
2009 – 2011	*NMRS*, Networked Multi-Robotics Simulation, supported by EDA (European Defense Agency). Responsible for the decentralised multi-robot control strategies.
2007 – 2011	*MOBINISS*, Mobile intelligent information sensor systems on unmanned ground/aerial/sea vehicles, supported by the Belgian Ministry of Defense
2007 - 2010	*VIEW_FINDER*, Robotics assistance to fire-fighting services and development of an intelligent crisis management information system, supported by the European Commission under the 6th Framework Programme

PUBLICATIONS

Book Chapters

1. Baudoin, Yvan; Doroftei, Daniela; de Cubber, Geert; Habumuremyi, Jean‐Claude; Balta, Haris; Doroftei, Ioan; ,Unmanned Ground and Aerial Robots Supporting Mine Action Activities,Mine Action-The Research Experience of the Royal Military Academy of Belgium, 2017, InTech
2. De Cubber, Geert; Doroftei, Daniela; Rudin, Konrad; Berns, Karsten; Matos, Anibal; Serrano, Daniel; Sanchez, Jose; Govindaraj, Shashank; Bedkowski, Janusz; Roda, Rui; ,Introduction to the Use of Robotic Tools for Search and Rescue,Search and Rescue Robotics-From Theory to Practice,,,,2017,InTech
3. Doroftei, Daniela; De Cubber, Geert; Wagemans, Rene; Matos, Anibal; Silva, Eduardo; Lobo, Victor; Cardoso, Guerreiro; Chintamani, Keshav; Govindaraj, Shashank; Gancet, Jeremi; ,User-Centered Design,Search and Rescue Robotics-From Theory to Practice,,,,2017,InTech
4. De Cubber, Geert; Doroftei, Daniela; Balta, Haris; Matos, Anibal; Silva, Eduardo; Serrano, Daniel; Govindaraj, Shashank; Roda, Rui; Lobo, Victor; Marques, Mário; ,Operational Validation of Search and Rescue Robots,Search and Rescue Robotics-From Theory to Practice,,,,2017,InTech
5. De Cubber, Geert; Doroftei, Daniela; ,Human Victim Detection and Stereo-based Terrain Traversability Analysis for Behavior-Based robot navigation,Using Robots in Hazardous Environments,1,,476-498,2011,Elsevier

Journal Papers

1. G. De Cubber, S. A. Berrabah, D. Doroftei, Y. Baudoin, and H. Sahli, "Combining Dense structure from Motion and Visual SLAM in a Behavior-based Robot Control Architecture," International journal of Advanced Robotics Systems, vol. 7, iss. 1, 2010.

2. D. Doroftei and E. Colon, "Decentralized Multi-Robot Coordination in an Urban Environment," European Journal of Mechanical and Environmental Engineering, vol. 1, 2010.

3. D. Doroftei, E. Colon, Y. Baudoin, and H. Sahli, "Development of a behaviour-based control and software architecture for a visually guided mine detection robot," European Journal of Automated Systems, vol. 43, iss. 3, pp. 295-314, 2009.

4. D. Doroftei, E. Colon, and G. De Cubber, "A behaviour-based control and software architecture for the visually guided Robudem outdoor mobile robot," Journal of Automation, Mobile Robotics & Intelligent Systems, vol. 2, iss. 4, pp. 19-24, 2008.

Conference Papers

1. H. Balta, G. De Cubber, Y. Baudoin, D. Doroftei ,"UAS deployment and data processing during the Balkans flooding with the support to Mine Action" ,Proceedings of the 8th International Advanced Robotics Programme (IARP) Workshop on Robotics for Risky Environment (RISE), pp 28-29, Lisbon, Portugal, 2015.

2. D. Doroftei, A. Matos, V. Lobo, R. Wagemans, G. De Cubber, Geert ,"Operational Validation of robots for risky environments",8th IARP Workshop on Robotics for Risky Environments,1,1, Lisbon, Portugal, 2015,

3. D. Doroftei, A. Matos, and G. De Cubber, "Designing Search and Rescue Robots towards Realistic User Requirements," in Proc. Advanced Concepts on Mechanical Engineering (ACME), 2014.

4. G. De Cubber, D. Doroftei, Y. Baudoin, D. Serrano, K. Berns, C. Armbrust, K. Chintamani, R. Sabino, S. Ourevitch, and T. Flamma, "Search and Rescue robots developed by the European ICARUS project," in Proc. 7th IARP International Workshop on Robotics for Risky Environment - Extreme Robotics, 2013.

5. H. Balta, G. De Cubber, D. Doroftei, Y. Baudoin, and H. Sahli, "Terrain Traversability Analysis for off-road robots using Time-Of-Flight 3D Sensing," in Proc. 7th IARP International Workshop on Robotics for Risky Environment - Extreme Robotics, 2013.

6. G. De Cubber, D. Doroftei, D. Serrano, K. Chintamani, R. Sabino, and S. Ourevitch, "The EU-ICARUS project: developing assistive robotic tools for search and rescue operations," in Proc. IEEE International Symposium on Safety, Security, and Rescue Robotics, 2013.

7. H. Balta, G. De Cubber, and D. Doroftei, "Increasing Situational Awareness through Outdoor Robot Terrain Traversability Analysis based on Time- Of-Flight Camera," 2013.

8. G. De Cubber, D. Doroftei, Y. Baudoin, D. Serrano, K. Chintamani, R. Sabino, and S. Ourevitch, "ICARUS: Providing Unmanned Search and Rescue Tools," in Proc. 6th IARP Workshop on Risky Interventions and Environmental Surveillance (RISE), 2012.

9. A. Conduraru, I. Conduraru, E. Puscalau, G. De Cubber, D. Doroftei, and H. Balta, "Development of an autonomous rough-terrain robot," in Proc. IROS2012 Workshop on Robotics for Environmental Monitoring (WREM), 2012.

10. G. De Cubber, D. Doroftei, Y. Baudoin, D. Serrano, K. Chintamani, R. Sabino, and S. Ourevitch, "ICARUS: An EU-FP7 project Providing Unmanned Search and Rescue Tools," in Proc. IROS2012 Workshop on Robots and Sensors integration in future rescue INformation system (ROSIN'12), 2012.

11. D. Doroftei, G. De Cubber, and K. Chintamani, "Towards collaborative human and robotic rescue workers," in Proc. 5th International Workshop on Human-Friendly Robotics (HFR2012), 2012.

12. G. De Cubber, D. Doroftei, Y. Baudoin, D. Serrano, K. Chintamani, R. Sabino, and S. Ourevitch, "Operational RPAS scenarios envisaged for search & rescue by the EU FP7 ICARUS project," in Proc. Remotely Piloted Aircraft Systems for Civil Operations (RPAS2012), 2012.

13. G. De Cubber, D. Doroftei, H. Sahli, and Y. Baudoin, "Outdoor Terrain Traversability Analysis for Robot Navigation using a Time-Of-Flight Camera," in Proc. RGB-D Workshop on 3D Perception in Robotics, 2011.

14. D. Doroftei and E. Colon, "Decentralized multi-robot coordination for a risky surveillance application." in Proc. IARP HUDEM 2011, 2011.

15. G. De Cubber and D. Doroftei, "Multimodal terrain analysis for an all-terrain crisis Management Robot," in Proc. IARP HUDEM 2011, 2011.

16. G. De Cubber, D. Doroftei, K. Verbiest, and S. A. Berrabah, "Autonomous camp surveillance with the ROBUDEM robot: challenges and results," in Proc. IARP Workshop RISE'2011, 2011.

17. G. De Cubber, D. Doroftei, S. A. Berrabah, and Y. Baudoin, "Using visual perception for controlling an outdoor robot in a crisis management scenario," in Proc. ROBOTICS 2010, 2010.

18. D. Doroftei and E. Colon, "Multi-robot collaboration and coordination in a high-risk transportation scenario," in Proc. IARP WS HUDEM'2010, 2010.

19. Y. Baudoin, G. De Cubber, E. Colon, D. Doroftei, and S. A. Berrabah, "Robotics Assistance by Risky Interventions: Needs and Realistic Solutions," in Proc. Workshop on Robotics for Extreme conditions, 2010.

20. D. Doroftei and E. Colon, "Decentralized Multi-Robot Coordination for Risky Interventions," in Proc. Fourth International Workshop on Robotics for risky interventions and Environmental Surveillance-Maintenance, RISE'2010, 2010.

21. D. Doroftei, G. De Cubber, E. Colon, and Y. Baudoin, "Behavior Based Control For An Outdoor Crisis Management Robot," in Proc. Third International Workshop on Robotics for risky interventions and Environmental Surveillance-Maintenance, 2009.

22. G. De Cubber, D. Doroftei, L. Nalpantidis, G. Sirakoulis, and A. Gasteratos, "Stereo-based Terrain Traversability Analysis for Robot Navigation," in Proc. Third International Workshop on Robotics for risky interventions and Environmental Surveillance-Maintenance, 2009.

23. Y. Baudoin, D. Doroftei, G. De Cubber, S. A. Berrabah, E. Colon, C. Pinzon, A. Maslowski, and J. Bedkowski, "View-Finder: a European project aiming the Robotics assistance to Fire-fighting services and Crisis Management," in Proc. IARP workshop on Service Robotics and Nanorobotics, 2009.

24. Y. Baudoin, D. Doroftei, G. De Cubber, S. A. Berrabah, C. Pinzon, J. Penders, A. Maslowski, and J. Bedkowski, "VIEW-FINDER : Outdoor Robotics Assistance to Fire-Fighting services," in Proc. International Symposium Clawar'2009, 2009.

25. Y. Baudoin, D. Doroftei, G. De Cubber, S. A. Berrabah, C. Pinzon, F. Warlet, J. Gancet, E. Motard, M. Ilzkovitz, L. Nalpantidis, and A. Gasteratos, "View-Finder: Robotics Assistance to Fire-Fighting Services and Crisis Management," in Proc. IEEE International Workshop on Safety, Security, and Rescue Robotics, (SSRR 2009), 2009.

26. G. De Cubber, D. Doroftei, and G. Marton, "Development of a visually Guided Mobile Robot for Environmental Observation as an Aid for Outdoor Crisis Management Operations," in Proc. IARP Workshop on Environmental Maintenance & Protection, 2008.

27. D. Doroftei and Y. Baudoin, "Development of a semi-autonomous De-mining vehicle," in Proc. 7th IARP WS HUDEM'2008, 2008.

28. D. Doroftei and J. Bedkowski, "Towards the autonomous navigation of robots for risky interventions," in Proc. RISE 2008, 2008.

29. D. Doroftei, E. Colon, and G. De Cubber, "A behaviour-based control and software architecture for the visually guided Robudem outdoor mobile robot," in Proc. ISMCR2007, 2007.

30. D. Doroftei, E. Colon, Y. Baudoin, and H. Sahli, "Development of a semi-autonomous off-road vehicle," in Proc. HuMan'07 (IEEE), 2007, pp. 340-343.

31. D. Doroftei, E. Colon, and Y. Baudoin, "A modular control architecture for semi-autonomous navigation," in Proc. CLAWAR 2006 conference, 2006, pp. 712-715.

32. D. Doroftei, E. Colon, and Y. Baudoin, "Development of a control architecture for the ROBUDEM outdoor mobile robot platform," in Proc. IARP Workshop RISE, 2006.