Dídac Busquets' Curriculum Vitae

Personal details

First name:	Dídac
Last name:	Busquets Font
E-mail:	didac@cs.cmu.edu
Date of birth:	July 9th, 1975
Place of birth:	Barcelona
Nationality:	Spanish

Education

- 2003: **PhD in Computer Science** from the Technical University of Catalonia (UPC). The thesis was carried out in the Artificial Intelligence Research Institute (IIIA-CSIC, Barcelona, Spain), under the supervision of Prof. Ramon López de Màntaras and Prof. Carles Sierra, and it was devoted to qualitative navigation in robotics. Title of the thesis: "A Multiagent Approach to Qualitative Navigation in Robotics".

- 1993-1999: Engineer on Computer Science, from Faculty of Computer Science (FIB) of the Technical University of Catalonia (UPC), Barcelona, Spain.

Grants received

- 2004-2005: **Postdoctoral Fulbright Scholarship** awarded by Ministerio de Educación y Ciencia (Spanish Ministry of Education and Science). I am currently doing a postdoctoral stay at the Robotics Institute (Carnegie Mellon University, USA).

- 2000-03: Predoctoral scholarship (ref. 2000FI-191) for research personnel training, awarded by Generalitat de Catalunya (Catalan Government). During this time I carried out the doctoral thesis in the Artificial Intelligence Research Institute (IIIA-CSIC).

- 1997-98: ERASMUS scholarship to study an academic year at the University of Bath (UK), School of Mathematics.

Participation in research projects

- Title: Multiagent system for qualitative landmark-based navigation
  Carried out in the Artificial Intelligence Research Institute (IIIA-CSIC)
  Funded by: Spanish Ministry of Science and Technology
  From: 1st January 2001
  Until: 31st December 2003
  Responsible researcher: Ramon López de Màntaras

Participation in conferences

- First International Conference on Informatics in Control, Automation and Robotics (ICINCO), Setúbal, Portugal, 2004, organized by Institute for Systems and Technologies of Information, Control and Communication (INSTICC), poster presentacion.

- Summer school: Robots and humans, Santiago de Compostela, 2004, organized by Universidad de Santiago, participation in panel and talk.

- VI Catalan Conference on Artificial Intelligence (CCIA), Palma de Mallorca, Spain, 2003, organized by Catalan Association on Artificial Intelligence (ACIA), paper presentation.

- International Spatial Cognition Summer Institute, Bad Zwischenahn (Germany), August 24 – September 6, 2003, organized by University of Bremen and the International Quality Network on Spatial Cognition.

- First International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS), Bologna, Italy, 2002, organized by International Foundation for Multi Agent Systems (IFMAS) and Università di Bologna, poster presentation.

- V Catalan Conference on Artificial Intelligence (CCIA), Castelló, Spain, 2002, organized by Catalan Association on Artificial Intelligence (ACIA), paper presentation.

- AAAI Spring symposium, Stanford University, California, USA, 2001, organized by American Association for Artificial Intelligence (AAAI) and Stanford University, paper presentation.

- International Conference on Multi-Agent Systems (ICMAS), Boston, USA, 2000, organized by International Foundation for Multi Agent Systems (IFMAS), paper presentation.

- 14th European Conference on Artificial Intelligence (ECAI), Berlin, Germany, 2000, organized by European Coordination Committee on Artificial Intelligence (ECCAI), paper presentation.

- III Catalan Conference on Artificial Intelligence (CCIA), Vilanova i la Geltrú (Barcelona), 2000, organized by la Catalan Association on Artificial Intelligence (ACIA), paper presentation.

Publications

Journal articles

- D. Busquets, C. Sierra and R. López de Màntaras. *A multi-agent approach to fuzzy landmark-based navigation*. Journal of Multiple-Valued Logic and Soft Computing, Old City Publishing , Vol. 9, pp. 195-220, Old City Publishing, 2003.

- D. Busquets, C. Sierra and R. López de Màntaras. *A Multi-agent approach to qualitative landmark-based navigation*. Autonomous Robots Journal, Vol. 15, pp. 129-154, 2003.

Conference contributions

- D. Busquets, R. López de Màntaras and C. Sierra. *Evolving a Multiagent System for Landmark-Based Robot Navigation*. Artificial Intelligence Research and Development (Proceedings of CCIA'03), pp. 87-98, IOS Press, 2003 (An extended version will appear in the International Journal of Intelligent Systems).

- T.G. Dietterich, D. Busquets, R. López de Màntaras and C. Sierra. *Action Refinement in Reinforcement Learning by Probability Smoothing*. Proceedings of the 19th International Conference on Machine Learning (ICML'02), pp. 107-114, 2002.

- D. Busquets, R. López de Màntaras, C. Sierra and T.G. Dietterich. *Reinforcement Learning for Landmark-based Robot Navigation*. Proceedings of the first International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS 2002, Bologna), pp. 841-842, ACM press, 2002.

- D. Busquets, T.G. Dietterich, R. López de Màntaras and C. Sierra. *A multi-agent architecture integrating learning and fuzzy techniques for landmark-based robot navigation.* Topics in Artificial Intelligence. Lecture Notes in Artificial Intelligence (Proceedings of CCIA'02), vol. 2504, pp. 269-281, Springer, Verlag, 2002.

- D. Busquets, R. López de Màntaras and C. Sierra. *A robust MAS coordination mechanism for action selection*. Proceedings of 2001 AAAI Spring Symposium, Stanford, CA. Robust Autonomy Serie, pp. 38-40, 2001.

- Cortés, U., López-Navidad, A., Vázquez-Salceda, V., Vázquez S., Busquets, D., Nicolás, M., Lopes, S., F. Vázquez, F., Caballero, F. *An Agent Mediated Institution for the Exchange of Human Tissues among Hospitals for Transplantation.* Seventh International Conference on Information Networks, Systems and Technologies (ICINASTe-2001), pp. 206-213. Minsk, Bielorussia, 2001.

- C. Sierra, R. López de Màntaras and D. Busquets. *Multiagent Bidding Mechanisms for Robot Qualitative Navigation*. Intelligent Agents VII. Lecture Notes in Artificial Intelligence, Vol. 1986 (Proceedings of ATAL 2000), pp. 198-212, Springer, Verlag, 2000.

- Cortés, U., López-Navidad, A., Vázquez-Salceda, V., Vázquez S., Busquets, D., Nicolás, M., Lopes, S., F. Vázquez, F., Caballero, F. *UCTx: A Multi-Agent approach to model a Transplant Coordination Unit.* 3r Congrés Català d'Intel.ligència Artificial (CCIA 2000). Butlletí de l'ACIA 22:23-28, 2000.

Languages

Language	Speaking	Writing	Reading
Catalan (mother tongue)	Excellent	Excellent	Excellent
Spanish	Excellent	Excellent	Excellent
English	Excellent	Excellent	Excellent
French	Fair	Fair	Fair
Japanese	Basic notions	Basic notions	Basic notions

Certificates	Place and date of award
Cambridge Certificate of Proficiency in English (CPE)	Bath, UK (June 1998)
Cambridge First Certificate in English (FCE)	Barcelona, Spain (June 1995)