

Short Curriculum Vitæ

July 2012

Personal details

Name: António Maria Lobo César Alarcão Ravara

Date and Place of birth: April 6, 1968, Lisbon, Portugal

Nationality: Portuguese

Affiliation:

- Research Center for Informatics and Information Technologies (Centro de Investigação em Informática e Tecnologias da Informação - CITI - <http://citi.di.fct.unl.pt>)
and
- Departamento de Informática (Informatics Department), Faculdade de Ciências e Tecnologia (Faculty of Sciences and Technology), Universidade NOVA de Lisboa (New University of Lisbon)
<http://www.di.fct.unl.pt>

Institutional address: Departamento de Informática Faculdade de Ciências e Tecnologia Quinta da Torre, 2829-516 CAPARICA, PORTUGAL

Telephone: +351 212 948 500

Email: aravara@fct.unl.pt **Web page:** <http://ctp.di.fct.unl.pt/~aravara/>

Career

Academic degrees

1. Ph.D. in Mathematics, Technical University of Lisbon, December 2000.
2. M.Sc. in Applied Mathematics, Technical University of Lisbon, March 1996.
3. B.Sc. in Applied Mathematics, University of Lisbon, October 1991.

Positions

1. Assistant Professor at the Department of Informatics of the Faculty of Sciences and Technology of the New University of Lisbon, from September 2009.
2. Assistant Professor for Logic and Computer Science at the Department of Mathematics of Instituto Superior Técnico, Technical University of Lisbon, from January 2001 to August 2009.
3. Teaching Assistant for Computer Science at the Department of Mathematics of Instituto Superior Técnico, Technical University of Lisbon, from September 1992 to December 2000.
4. Programmer at the Informatics Department of the Instituto Geográfico e Cadastral, from October 1989 to August 1992.

Main courses taught

1. Discrete Mathematics
2. Logic and Computation
3. Introduction to Programming
4. Model of Concurrent Systems
5. Theory of Computation

Students

1. Post-Doc: Marco Giunti (from July 2012)
2. PhD:
Maxime Gamboni (concluded in December 2011)
Luís Dominguez (submission in December 2012)
3. MSc: Joana Martinho (2005), Tiago Reis (2007), Diogo Serra (2012)

PhD examinations

1. Dinh Viet Dung, University of Pisa (2012)
2. Andi Bejleri, Imperial College London (2011)
3. Hélia Guerra, University of Azores (2004)

Scientific activities

Main scientific area of research

Semantics of programming languages, theory of concurrent and distributed systems (mainly using process calculi), type systems and static verification of correctness properties.

ACM classification D.3 Programming Languages, F.1 Computation by Abstract Devices, F.3 Logics and Meanings of Programs, F.4 Mathematical Logic and Formal Languages.

AMS classification 03B Mathematical logic and foundations (temporal and modal logics), 68Q Theory of computing (Models of computation, semantics, specification and verification, models and methods for concurrent and distributed computing)

Service to the community

1. Member of the Steering Committee of FMOODS/FORTE since 2009.
2. Member of the Steering Committee of DisCoTec from 2008 to 2010.
3. Co-Chair of the Program Committee of FOCLASA 2011 and 2012.
4. Member of the Program Committee of ACM SAC SVT track 2011 (Symposium of Applied Computing, Software Verification and Testing track), of FoVeOOS 2010 and 2011 (International Conference on Formal Verification of Object-Oriented Software), of FMOODS 2007, 2008 and 2011 (Formal Methods for Object-Oriented Distributed Systems), of FOCLASA 2008 to 2010 (International Workshop on the Foundations of Coordination Languages and Software Architectures), of WS-FM 2008 (5th International Workshop on Web Services and Formal Methods), and of WWV 2012 (International Workshop on Automated Specification and Verification of Web Systems).
5. General chair of DisCoTec 2009 (4th Federated Event on Distributed Computing Techniques), one of the major events sponsored by IFIP (International Federation for Information processing).
6. Participated (as Workshop organization chair) in the organisation of the Conferences:
 - The 18th International Conference on Concurrency Theory and Satellite Workshops, Lisboa, September 3-8, 2007.
 - The 32nd International Colloquium on Automata, Languages and Programming and Satellite Workshops, Lisboa, July 10–17, 2005.
7. Solicited frequently as reviewer for conferences as CONCUR, ECOOP, ETAPS, FMOODS, ICALP, LICS, POPL, and for journals as Acta Informaticæ, the Journal of Information and Computation, the Journal of Logic and Algebraic Programming, the Journal of Software, Science of Computer Programming, and Theoretical Computer Science.

Recent projects

1. Leader of a 3 year portuguese research project on statically ensuring liveness properties of distributed systems (April 2012 to March 2015), funded by FCT (Fundação para a Ciência e a Tecnologia)
2. Leader of a 3 year portuguese research project on behavioural and spatial types for distributed systems (July 2005 to June 2008), funded by FCT (Fundação para a Ciência e a Tecnologia).
<http://www.math.ist.utl.pt/~amar/projectos/fct/spacetimetypes.html>
3. Portuguese representative in the Management Committee of the COST action IC0701 — Formal Verification of Object-Oriented Software (March 2008 to February 2012).
<http://www.cost-ic0701.org/>
4. Leader of an german-portuguese bilateral research project with Dr. Uwe Nestmann from the Technical University of Berlin, funded by GRICES/DAAD (April 2008 to March 2010).
<http://www.math.ist.utl.pt/~amar/projectos/bilateral/daad08.html>
5. Leader of an anglo-portuguese bilateral research project with Dr. Simon Gay from the University of Glasgow, funded by the British Council (April 2005 to March 2006).
<http://www.math.ist.utl.pt/~amar/projectos/windsor0506/windsor.html>
6. Participated in several national, bilateral and EU IST projects over the last 5 years, namely the EU Mikado and Profundis (2002 to 2005) and Sensoria (2006 to 2009).
<http://www.math.ist.utl.pt/~amar/projectos/ist/SENSORIAatIST.html>

Recent grants

1. EPSRC (UK Engineering and Physical Sciences Research Council) Visiting Fellowship from January to June 2008, visiting Dr. Simon Gay, Senior Lecturer at the Department of Computing Science, University of Glasgow, UK.
2. FCT (Portuguese Fundação para a Ciência e a Tecnologia) Sabbatical grant from January to June 2008.
3. FCT (Portuguese Fundação para a Ciência e a Tecnologia) Post-Doctoral grant from March to August 2002, visiting the project MIMOSA (Migration and mobility: semantics and applications) of INRIA (Institut National de Recherche en Informatique et en Automatique), France.
4. Project RNRT (Réseau National de Recherche en Télécommunications) MARVEL (Machine répartie virtuelle et langage pour objets mobiles) Post-Doctoral grant from September 2000 to February 2001.

Main publications

Theses

1. Typing Non-uniform Concurrent Objects. Ph. D. Thesis, Instituto Superior Técnico, Technical University of Lisbon, Portugal, December 2000. Supervised by Amílcar Sernadas and Vasco T. Vasconcelos.
2. Semântica Operacional da Linguagem GNOME em Typed Concurrent Objects (Semantics of GNOME over TyCO). Master's thesis, Instituto Superior Técnico, Technical University of Lisbon, Portugal, March 1996 (in Portuguese). Supervised by Amílcar Sernadas and Vasco T. Vasconcelos.

Editor

1. Proceedings 10th International Workshop on the Foundations of Coordination Languages and Software Architectures (FOCLASA 2011). Mohammad Reza Mousavi and António Ravara. Electronic Proceedings in Theoretical Computer Science, 58, 2011.

Book chapters

1. Behavioral Theory for Session-Oriented Calculi. Ivan Lanese, António Ravara, and Hugo T. Vieira. In *Rigorous Software Engineering for Service-Oriented Systems — Results of the SENSORIA project on Software Engineering for Service-Oriented Computing*, volume 6582 of LNCS, Springer, 2011.
2. Advanced Mechanisms for Service Combination and Transactions. Carla Ferreira, Ivan Lanese, António Ravara, Hugo T. Vieira, and Gianluigi Zavattaro. In *Rigorous Software Engineering for Service-Oriented Systems — Results of the SENSORIA project on Software Engineering for Service-Oriented Computing*, volume 6582 of LNCS, Springer, 2011.

Journals

1. An Algebra of Behavioural Types. António Ravara, Pedro Resende and Vasco T. Vasconcelos. In *Information and Computation*, 212: 64–91, 2012.
2. Encoding cryptographic primitives in a calculus with polyadic synchronization. Joana Martinho and António Ravara. In *Journal of Automated Reasoning*, 46(3-4): 293-323, 2011.

3. Typechecking a Multithreaded Functional Language with Session Types. Vasco T. Vasconcelos, Simon J. Gay, and António Ravara. In *Theoretical Computer Science*, 368(1-2):64–87, 2006.
4. Typing the Behavior of Objects and Components using Session Types. Antonio Vallecillo, Vasco T. Vasconcelos, and António Ravara. In *Fundamenta Informaticæ*, 73(4): 583–598, 2006.
5. Vasco T. Vasconcelos and António Ravara. Communication Errors in the Pi-Calculus are Undecidable. In *Information Processing Letters*, 71:229–233, 1999.

International conferences with formal refereeing process

1. Modular Session Types for Distributed Object-Oriented Programming. Simon Gay, Vasco T. Vasconcelos, António Ravara, Nils Gesbert, and Alexandre Zua Caldeira). In *Symposium on Principles of Programming Languages (POPL'10)*, ACM Press, 2010.
2. Responsive Choice in Mobile Processes. Maxime Gamboni and António Ravara. In *5th International Symposium on Trustworthy Global Computing (TGC'10)*, volume 6084 of LNCS, pages 135–152, Springer, 2010.
3. Dynamic Recovering of Long Running Transactions. Cátia Vaz, Carla Ferreira e António Ravara. In *4th Symposium on Trustworthy Global Computing (TGC'08). Lecture Notes in Computer Science*, Springer-Verlag, 2009.
4. Behavioural Theory at Work: Program Transformations in a Service-Centred Calculus. Luís Cruz-Filipe, Ivan Lanese, Francisco Martins, António Ravara and Vasco T. Vasconcelos. In *10th IFIP International Conference on Formal Methods for Open Object-based Distributed Systems (FMOODS'08)*, volume 5051 of *Lecture Notes in Computer Science*, pages 59–77. Springer-Verlag, 2008.
5. Disciplining Orchestration and Conversation in Service-Oriented Computing. Ivan Lanese, Vasco T. Vasconcelos, Francisco Martins and António Ravara. In *5th IEEE International Conference on Software Engineering and Formal Methods (SEFM'07)*, pages 305–314. IEEE, 2007.
6. SCC: a Service Centered Calculus. Michele Boreale, Roberto Bruni, Luís Caires, Rocco De Nicola, Ivan Lanese, Michele Loreti, Francisco Martins, Ugo Montanari, Antonio Ravara, Davide Sangiorgi, Vasco Vasconcelos and Gianluigi Zavattaro. In *3rd International Workshop on Web Services and Formal Methods (WS-FM'06)*, volume 4184 of *Lecture Notes in Computer Science*, pages 38–57. Springer-Verlag, 2006.
7. Session Types for Functional Multithreading. Vasco T. Vasconcelos, António Ravara, e Simon Gay. In *15th International Conference on Concurrency Theory*, volume 3170 of *Lecture Notes in Computer Science (CONCUR'04)*, pages 497–511. Springer-Verlag, 2004.
8. Typing Non-uniform Concurrent Objects. António Ravara and Vasco T. Vasconcelos. In *11th International Conference on Concurrency Theory (CONCUR'00)*, volume 1877 of *Lecture Notes in Computer Science*, pages 474–488. Springer-Verlag, 2000.