

Rodrigo de Oliveira

Research Scientist at Telefonica Research

Torre Telefónica-Diagonal 00

Plaza de Ernest Lluch i Martín, 5, 08019 Barcelona, Spain

oliveirard@yahoo.com.br ✉
www.ic.unicamp.br/~oliveira 🌐

RESEARCH INTERESTS

My main research interests lie at the union between **human-computer interaction** and **persuasive computing**, and my work focuses on combining both areas by designing and evaluating computing solutions that overcome information overload, improve the users' experience of their daily activities, and support people in achieving their goals. My research interests include: **ubiquitous** and **mobile computing, user modeling, e-health, e-learning, and multimedia systems**.

EDUCATION

- 2004 - 2008 **Ph.D. in Computer Science**, State University of Campinas, Brazil
Areas: Human-Computer Interaction, Mobile Computing
GPA: 4.0 / 4.0
- 2002 - 2004 **M.S. in Computer Science**, State University of Campinas, Brazil
Areas: Artificial Intelligence & Education, Human-Computer Interaction, Persuasive Computing
GPA: 4.0 / 4.0
- 1998 - 2001 **B.S. in Computer Science**, Federal University of Lavras, Brazil
GPA: 91.4 / 100.0 (Highest GPA award)

AWARDS & FELLOWSHIPS

- 2011 **IEEE ICME '11 Quality Reviewer**, IEEE International Conference on Multimedia and Expo, Barcelona, Spain
- 2010 **CHI'10 Best Paper Nominee**, ACM Int. Conference on Human Factors in Computing Systems, Atlanta, USA
- 2009 - 2012 **Torres Quevedo Fellowship**, financed by the European Social Fund and the Spanish Government
- 2009 **Multimedia'09 Best Paper Nominee**, ACM International Conference on Multimedia, Beijing, China
- 2009 **MobileHCI'09 Best Paper Nominee**, Int. Conf. on HCI with Mobile Devices and Services, Bonn, Germany
- 2009 **Microsoft Research Talent**, featured among 6 Microsoft Research talented fellows worldwide
- 2007 - 2008 **Microsoft Research Fellowship**, two PhD candidates selected from 13 universities in Latin America
- 2002 - 2007 **Graduate Scholarship**, financed by the Brazilian Government (Capes and CNPq)
- 2002 **Graduation Distinction**, highest GPA from all courses of Federal University of Lavras, Brazil
- 1999 - 2001 **Undergraduate Scholarship**, financed by the Brazilian Government (CNPq)

PROFESSIONAL EXPERIENCE

- Jan'11 - present **Research Scientist** at Telefonica Research, Barcelona, Spain
- Jan'09 - Jan'11 Postdoctoral Researcher at Telefonica Research, Barcelona, Spain
- Design, development and evaluation of solutions for telecommunications, health care, social networks, multimedia storytelling and information management. Customer models developed for biz intelligence.
 - Skills: Ethnographic studies, lab/field studies, analytical evaluations, surveys and interviews, data analysis, mobile/desktop/web development, project management (teams in Mexico and Spain).
- Mar'04 - Apr'08 **Graduate Research Assistant & Teaching Fellow** at State University of Campinas, Brazil
- Design, development and evaluation (lab studies/surveys/interviews) of a mobile phone application that dynamically adapts desktop web pages for handheld interaction.
 - Teaching fellow: Algorithms and Computers Programming, +/- 50 students (2004/2006)
 - Skills: JavaScript, CSS, HTML, DOM, UML
- May'07 - Aug'07 **Research Intern** at Microsoft Research, Redmond, USA
- Design, development and evaluation (field study/surveys) of a mobile phone-based system to enhance runners' performance using persuasive techniques
 - Skills: C++, MFC, Visual Studio, Bluetooth, electrocardiogram and accelerometer sensors
- Aug'02 - Feb'04 **Graduate Research Assistant & Teaching Assistant** at State University of Campinas, Brazil
- Design, development and evaluation (lab study/survey) of a tutoring system that applies different teaching strategies according to the user's personality profile and behavior.
 - Teaching assistant: Data Processing, +/- 50 students (2002)
 - Skills: J2EE, JSP, Javascript, CSS, HTML, MySQL, SQL, Tomcat, UML
- Aug'99 - Jul'01 **Undergraduate Research Assistant & Web Developer** at Federal University of Lavras, Brazil
- Design, development and evaluation (surveys) of the first e-learning courses from UFLA
 - Skills: Delphi, HTML, Flash, Director, Dreamweaver/FrontPage, SQL

PUBLICATIONS

- Book chapters*
- B.1. Oliver, N.; Flores-Mangas, F.; Oliveira, R. Towards wearable physiological monitoring on a mobile phone. In: Olla, P.; Tan, J. (Ed.). **Mobile Health Solutions for Biomedical Applications**. IGI Global, USA, 2009.
- B.2. Oliveira, R.; Rocha, H. V. Multi-device design in contexts of interchange and task migration. In: Pavlidis, I. (Ed.). **Human-Computer Interaction**. InTech Education & Publishing, Vienna, Austria, 75-100, 2008.
- Journal articles*
- J.1. Oliveira, R.; Cherubini, M.; Oliver, N. Influence of personality on satisfaction with mobile phone services. (under review).
- J.2. Oliveira, R.; Cherubini, M.; Oliver, N. Looking at near-duplicate videos from a human-centric perspective. *ACM Transactions on multimedia computing, communications and applications (TOMCCAP)*, 6, 3, Article 15 (August 2010), 1-22.
- J.3. Oliveira, R.; Zambalde, A. L.; Alves, R. M.; Gomes, S. A. C. Uso do modelo OOHDM para a construção de uma aplicação de ensino voltada para o setor agropecuário. *Revista brasileira de agroinformática (RBI-Agro)*, v.4, n.1, p.47-64, 2002.
- J.4. Lopes, M. A.; Zambalde, A. L.; Carvalho, R. M.; Santos, A. B.; Castro, C. L.; Oliveira, R.; Gomes, S. A. C. Educação via internet direcionada ao setor agropecuário: o caso UFLATEC. *Revista brasileira de agroinformática (RBI-Agro)*, v.3, n.1, pp.1-12, 2000.
- Conference papers*
- C.1. Ruiz, J. P.; Riederer, C.; Erramilli, V.; Cherubini, M.; Oliveira, R. Your browsing behavior for a Big Mac: Economics of personal information online. (to be submitted; available at arxiv.org/pdf/1112.6098).
- C.2. Cherubini, M.; Oliveira, R.; Hiltunen, A.; Oliver, N. Barriers and bridges in the adoption of today's mobile phone contextual services. *Proc. of the 13th international conference on human-computer interaction with mobile devices and services (MobileHCI)*. Stockholm, Sweden: ACM Press, 167-176, 2011.
- C.3. Oliveira, R.; Karatzoglou, A.; Concejero, P.; Armenta, A.; Oliver, N. Towards a psychographic user model from mobile phone usage. *Proc. of 29th ACM conference on human factors in computing systems, Works-in-Progress session (CHI)*. Vancouver, Canada: ACM, pp. 2191-2196, 2011.
- C.4. Obrador, P.; Oliveira, R.; Oliver, N. Supporting personal photo storytelling for social albums. *Proc. of the 18th ACM int. conference on multimedia (ACM MM)*. Florence, Italy: ACM Press, 561-570, 2010.
- C.5. Oliveira, R.; Cherubini, M.; Oliver, N. MoviPill: Improving medication compliance for elders using a mobile persuasive social game. *Proc. of 12th ACM International Conference on Ubiquitous Computing (Ubicomp)*. Copenhagen, Denmark: ACM, 251-260, 2010.
- ★ *best paper nominee*
- C.6. Cherubini, M.; Gutierrez, A.; Oliveira, R.; Oliver, N. Social tagging revamped: supporting the users' need of self-promotion through persuasive techniques. *Proc. of 28th ACM conference on human factors in computing systems (CHI)*. Atlanta, USA: ACM, 985-994, 2010.
- ★ *best paper nominee*
- C.7. Cherubini, M.; Oliveira, R.; Oliver, N. Understanding near-duplicate videos: a user-centric approach. *Proc. of the 17th ACM int. conf. on multimedia (ACM MM)*. Beijing, China: ACM Press, 35-44, 2009.
- ★ *best paper nominee*
- C.8. Cherubini, M.; Anguera, X.; Oliver, N.; Oliveira, R. Text versus speech: a comparison of tagging input modalities for camera phones. *Proc. of the 11th international conference on human-computer interaction with mobile devices and services (MobileHCI)*. Bonn, Germany: ACM Press, 1-10, 2009.
- C.9. Oliveira, R.; Cherubini, M.; Oliver, N. Human perception of near-duplicate videos. *Proc. of the 12th IFIP TC13 int. conf. on human-computer interaction (Interact)*. Uppsala, Sweden: Springer, 21-24, 2009.
- C.10. Cherubini, M.; Oliveira, R.; Oliver, N. 2009. Shopping uncertainties in a mobile and social context. *Proceedings of 7th international conference on pervasive computing, LBR (Pervasive)*. Nara, Japan, IEEE Computing, 11-14, 2009.
- C.11. Oliveira, R.; Oliver, N. 2008. TripleBeat: enhancing exercise performance with persuasion. *Proceedings of the 10th international conference on human-computer interaction with mobile devices and services (MobileHCI)*. Amsterdam, The Netherlands, ACM, 255-264, 2008.
- C.12. Oliveira, R.; Rocha, H. V. Consistency priorities for multi-device design. *Proceedings of the 11th IFIP TC13 international conference on human-computer interaction (Interact)*. Rio de Janeiro, Brazil: Springer LNCS 4662, Part I, 426-429, 2007.
- C.13. Oliveira, R.; Rocha, H. V. Consistency on multi-device design. *Proceedings of the 11th IFIP TC13 international conference on human-computer interaction (Interact), doctoral consortium*. Rio de Janeiro, Brazil: Springer LNCS 4663, Part II, 617-623, 2007.
- C.14. Oliveira, R.; Rocha, H. V. Conceptual multi-device design on the transition between e-learning and m-learning. *Proceedings of the 7th IEEE international conference on advanced learning technologies (ICALT)*. Niigata, Japan: IEEE Computer Society, 2007.
- C.15. Oliveira, R.; Rocha, H. V. Mobile access to web systems using a multi-device interface design approach. *Proceedings of PSC'06*. Las Vegas, USA: CSREA Press, 37-43, 2006.
- C.16. Oliveira, R.; Rocha, H. V. Towards an approach for multi-device interface design. *Proceedings of the 11th WebMedia*. Poços de Caldas, Brazil: ACM, New York, NY, vol. 125, 1-3, 2005.

- C.17. Oliveira, R.; Rocha, H. V. SócrateS - Sistema de ensino-aprendizado inteligente para internet capaz de adotar dinamicamente estratégias de ensino híbridas usando MBTI. *Proceedings of the 15th SBIE*. Manaus, Brazil: Federal University of Amazonas, v.1, pp.217-226, 2004.
- C.18. Oliveira, R.; Zabalde, A. L.; Alves, R. M.; Silva, M. G. C. Internet aplicada à educação em ciências agrárias: curso de criação de caprinos via internet com apoio de cd interativo. *Proceedings of the 3rd SBI-Agro*. Foz do Iguaçu, Brazil, 3-7, 2001.
- C.19. Oliveira, R.; Zabalde, A. L.; Alves, R. M.; Gomes, S.A.C. Modelagem e desenvolvimento de uma ferramenta hiperídia de ensino voltada ao setor agro-pecuário usando OOHDM. *Proceedings of the 3rd SBI-Agro*. Foz do Iguaçu, Brazil, 26-41, 2001.
- C.20. Zabalde, A. L.; Oliveira, R.; Alves, R. M.; Lopes, M. A. Modelagem e implementação de uma ferramenta hiperídia para rebanhos utilizando OOHDM. *Proceedings of the 3rd SBI-Agro*. Foz do Iguaçu, Brazil, 115-119, 2001.
- Workshop papers*
- W.1. Oliveira, R.; Cherubini, M.; Oliver, N. Exploring persuasive techniques for medication compliance. *Proceedings of the Workshop on interactive systems in healthcare, at the 28th ACM conference on human factors in computing systems (CHI)*, 2010.
- W.2. Cherubini, M.; Oliveira, R.; Oliver, N.; Ferran, C. Gaze and gestures in telepresence: multimodality, embodiment, and roles of collaboration. *Proc. of the Workshop new frontiers in telepresence, at the ACM conference on computer supported cooperative work (CSCW)*. Savannah, USA. 1-4, 2010.
- W.3. Obrador, P.; Anguera, X.; Oliveira, R.; Oliver, N. The Role of Tags and Image Aesthetics in Social Image Search. *Proc. of the Workshop on social media, at the 17th ACM international conference on multimedia (ACM MM)*. Beijing, China: ACM Press, 65-72, 2009.
- W.4. Cherubini, M.; Oliveira, R.; Oliver, N. 2009. About shopping and social networks. *Proceedings of the Workshop on pervasive advertising, at the 7th international conference on pervasive computing, (Pervasive)*. Nara, Japan, IEEE Computing, 2009.
- Theses*
- T.1. Oliveira, R. *Design multi-dispositivo em contextos de uso alternado e migração de tarefas*. Campinas: Unicamp, 2008. 193p.
- T.2. Oliveira, R. *Sócrates - Sistema de ensino-aprendizado inteligente para internet com adoção dinâmica de estratégias de ensino híbridas usando MBTI*. Campinas: Unicamp, 2004. 80p.
- Technical reports*
- R.1. Oliveira, R.; Rocha, H. V. *Consistency priorities towards a user oriented multi-device design*. Technical Report, IC-07-36, Campinas: Unicamp, December 2007, 16-18.
- R.2. Oliveira, R.; Rocha, H. V. *Conceptual multi-device design: improving theoretical foundations*. Technical Report, IC-07-01, Campinas: Unicamp, February 2007, 14p.
- Abstracts*
- A.1. Obrador, P.; Oliveira, R.; Oliver, N. Audience dependent photo collection summarization. *Proceedings of the 18th ACM international conference on multimedia (ACM MM), multimedia grand challenge session*. Florence, Italy, 2010.
- A.2. Castro, C.; Oliveira, R.; Zabalde, A.; Alves, R. Internet aplicada à educação em ciências agrárias. Sistema web de ensino à distância: módulos ambiente de ensino e de gerenciamento de cursos. *Proc. of the 14th scient. initiation congress from UFLA*. Lavras, Brazil, p. 134, 2001.
- A.3. Oliveira, R.; Castro, C.; Alves, R.; Zabalde, A. Internet aplicada à educação em ciências agrárias: uso de cd interativo no estudo de casos relativos ao curso criação de caprinos. *Proc. of the 14th scientific initiation congress from UFLA*. Lavras, Brazil, p.137, 2001
- A.4. Castro, C.; Oliveira, R.; Zabalde, A.; Alves, R. Internet aplicada à educação em ciências agrárias: estudo de casos relativos aos cursos café - mercados futuros e modelagem de sistemas agroindustriais. *Proc. scientific initiation congress UFLA*. Lavras, Brazil, p. 119, 2000.
- A.5. Oliveira, R.; Castro, C.; Alves, R.; Zabalde, A. Internet aplicada à educação em ciências agrárias: estudo de casos relativos aos cursos custo de produção do leite e criação de caprinos. *Proc. of the 13th scientific initiation congress from UFLA*. Lavras, Brazil, p. 123, 2000.

PATENTS

- Oct 2012 Cherubini, M.; Oliveira, R.
Method to improve customers' loyalty programs based on users' experience. Filed in USA, #61/552145.
- May 2011 Oliveira, R.; Concejero, P.; Armenta, A.; Karatzoglou, A.; Martín, C.; Oliver, N.; Lara, R.
Customer cognitive style prediction based on mobile behavioral profile. Filed in USA, #13/177615.
- Aug 2010 Obrador, P.; Oliveira, R.; Oliver, N.
Automatic storytelling for photo albums using social network context. Filed in USA, #13/098801.
- Feb 2010 Oliveira, R.; Cherubini, M.; Oliver, N.
Improving medication compliance using persuasive computing. Filed in USA, #13/026648.
- Nov 2007 Oliver, N.; Oliveira, R.
Mobile exercise enhancement with virtual competition. Filed in USA, #7766794, issued Aug 3rd, 2010.

POPULAR PRESSES

- Nov, 2011 Summary of the Psychographics project in a TEDx Talk. **TEDx Barcelona**, Spain (<http://goo.gl/QCQsl>).
"My data soul" (original title)
- Jun, 2011 MoviPill helps chronic patients to follow their medication prescription. **CERMI magazine**, Spain.
"MoviPill, de Telefónica I+D, ayuda a los pacientes crónicos a seguir sus tratamientos medicos" (original title)
- Aug 2nd, 2010 Report on Future of Health for UNICEF: Gaming For Health. **PSFK Future of Health** website.
- Jul 4th, 2010 MoviPill: playing and self-medicating. **La Vanguardia** newspaper, Catalonia, Spain
"El móvil gana juego – MoviPill: jugar y medicarse" (original title)
- Jul 2009 Innovation: priming the global talent pipeline. **Microsoft Research: External Research Division**, USA
"Rodrigo de Oliveira: early calling to computer science takes young researcher far" (original title)
- Mar 14th, 2008 3G mobile phone standards and technology. **EPTV Jornal Regional (Globo)**, Campinas, Brazil
"Acesso móvel à internet cresce 167% em 6 meses" (original title)
- Nov 21st, 2007 Workshop of doctorate theses. **State University of Campinas website**, Campinas, Brazil
"Alunos apresentam projetos em workshop de teses de doutorado" (original title)
- Jul 19th, 2007 Live demo of TripleBeat. **Good Morning America (ABC) – The Wall Street Journal**, New York, USA
"New wireless products let you monitor health, home and kids" (original title)
- Jan 17th, 2007 Interview about Microsoft Research Fellowship Award. **Universitária Notícias (TV UFLA)**, Lavras, Brazil
- 1999 First e-learning courses of Federal University of Lavras. **Universitária Notícias (TV UFLA)**, Lavras, Brazil
- 1995 FestValda musical contest finals. Several local presses, Brazil

PROFESSIONAL ACTIVITIES

- Publication Co-Chair* MobileHCI 2012 - 14th Int. Conf. on HCI w/ Mobile Devices and Services, San Francisco, USA.
- Session Co-Chair* IJCAI 2011 - International Joint Conferences on Artificial Intelligence (industrial day), Barcelona, Spain.
- Tech Program Comm* ICME'12, IADIS IHCI'12, Nokia MDC'12, Interact'11 (design competition evaluator), ICME'11, ICME'10
- Reviewer Journal* IEEE Transactions on Multimedia 2010/2011.
- Reviewer Conference* WWW'12, CHI'12, CHI'11, UIST'11, Pervasive Healthcare'11, ICME'11, IHC+CLIHC'11, Ubicomp'10, MobileHCI'10, ICME'10, IHC'10, ICMI/MLMI'09, IJCAI'09, CHI'09, Interact'07, SBIE'07, Webmedia'06, SBIE'05, SBIE'04, IHC'04, WIE'03.
- Membership* Association for Computing Machinery (ACM) since February 2009.

TECHNICAL SKILLS

- Data analysis* parametric/non-parametric analysis, structural equation modeling, supervised learning
 Weka, SPSS, AMOS
- Prototyping* C++, C, C#, Java, JSP, JavaScript, HTML, CSS, SQL
 MySQL, Tomcat, Visual Studio, Photoshop, Dreamweaver, several audio/video applications
- UX techniques* A/B testing, scenario testing, field/lab study, survey design/deployment, usability inspections (heuristic evaluation and cognitive walkthrough), ethnographic interview, naturalistic observation, focus group

LANGUAGES

- Fluent* English, Portuguese (*native*)
- Advanced* Spanish (*CEFR level: C1*)

EXTRACURRICULAR ACTIVITIES

- 1993 - 1999 Professional Musician
- 2003, 2004, 2005 Casual Musician

PORTFOLIO

- 2004 - 2011 www.ic.unicamp.br/~oliveira/portfolio.htm