

# CURRICULUM VITAE

## PERSONAL DATA

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## BIOSKETCH

Dr. Stefano Burigat is Assistant Professor at the University of Udine, Italy, where he teaches Mobile Application Design, and he is member of the Human-Computer Interaction Laboratory (<http://hcilab.uniud.it>). His main research activity is in the area of human-computer interaction. He focuses on research topics such as information presentation on mobile devices, mobile interface design and evaluation, positioning techniques for indoor and outdoor navigation, navigation aids for 3D virtual environments. He is author of more than 20 internationally refereed publications on these topics and he is reviewer for several international conferences and journals. He has been member of research units in national and international funded projects.

## ACADEMIC INFO

- Since November 2008, Assistant Professor at the Department of Mathematics, Computer Science and Physics of the University of Udine, Italy (formerly Department of Mathematics and Computer Science)
- PhD in Computer Science, 2007, University of Udine, Italy, with a thesis titled "Map-based geographic data on mobile devices: visualization, exploration and query issues"
- Master's degree in Computer Science, 2003, University of Udine, Italy, with a thesis titled "Ausili alla navigazione in ambienti virtuali tridimensionali: stato dell'arte, proposta di un approccio innovativo e sua valutazione sperimentale" (Navigation aids in 3D virtual environments: proposal and experimental evaluation of an innovative approach)

## PUBLICATIONS

### INTERNATIONAL JOURNALS with referees

1. Burigat S., Chittaro L., Passive and Active Navigation of Virtual Environments vs. Traditional Printed Evacuation Maps: a Comparative Evaluation in the Aviation Domain, *International Journal of Human-Computer Studies*, 87, March 2016, pp. 92-105.
  2. Burigat S., Chittaro L., On the Effectiveness of Overview+Detail Visualization on Mobile Devices, *Personal and Ubiquitous Computing*, 17(2), February 2013, pp. 371-385.
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3. Burigat S., Chittaro L., Visualizing References to Off-Screen Content on Mobile Devices: a Comparison of Arrows, Wedge, and Overview+Detail, *Interacting with Computers*, 23(2), March 2011, pp. 156-166.
4. Burigat S., Chittaro L., Interactive visual analysis of geographic data on mobile devices based on dynamic queries, *Journal of Visual Languages and Computing*, 19(1), February 2008, pp. 99-122.
5. Burigat S., Chittaro L., Navigation in 3D Virtual Environments: Effects of User Experience and Location-pointing Navigation Aids, *International Journal of Human-Computer Studies*, 65(11), November 2007, pp. 945-958.
6. Burigat S., Chittaro L., Gabrielli S., Navigation Techniques for Small-screen Devices: an Evaluation on Maps and Web pages, *International Journal of Human-Computer Studies*, 66(2), February 2008, pp. 78-97.
7. Burigat S., Chittaro L., Ieronutti L., Mobrex: Visualizing Users' Mobile Browsing Behaviors, *IEEE Computer Graphics and Applications*, 28(1), January/February 2008, pp. 24-32.

**BOOK CHAPTERS with referees**

8. Burigat S., Chittaro L., Decluttering of Icons based on Aggregation in Mobile Maps, In: Meng L., Zipf A., Winter S. (eds) *Map-based Mobile Services - Interactivity, Usability and Case Studies*, Springer, Berlin, 2008, pp. 13-32.
9. Burigat S., Chittaro L., Geographic data visualization on mobile devices for user's navigation and decision support activities, In: *Spatial Data on the Web - Modeling and Management*, Springer, Berlin, 2007, pp. 261-284.

**INTERNATIONAL CONFERENCES and WORKSHOPS with referees**

10. Burigat S., Chittaro L., Designing a mobile persuasive application to encourage reduction of users' exposure to cell phone RF emissions, *Proceedings of PERSUASIVE 2014: 9th International Conference on Persuasive Technologies*, LNCS 8462, Springer, Berlin, May 2014, pp. 13-24.
  11. Burigat S., Chittaro L., Vianello A., Dynamic visualization of large numbers of off-screen objects on mobile devices: an experimental comparison of wedge and overview+detail, *Proceedings of MOBILE HCI 2012: 14th International Conference on Human-Computer Interaction with Mobile Devices and Services*, ACM Press, New York, September 2012, pp. 93-102.
  12. Burigat S., Chittaro L., Mobile Navigation and Information Services for Disabled Students in University Buildings: a Needs Assessment Investigation, *Proceedings of the 2nd Workshop on Mobile Accessibility, MOBILE HCI 2012 Conference*, San Francisco, USA, September 2012.
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13. Burigat S., Chittaro L., Vianello A., A system for interactive visualization of off-screen objects on mobile devices, *Proceedings of MOBILE HCI 2012 companion: 14th International Conference on Human-Computer Interaction with Mobile Devices and Services*, ACM Press, New York, September 2012, pp. 167-168.
  14. Burigat S., Chittaro L., Pedestrian Navigation with Degraded GPS Signal: Investigating the Effects of Visualizing Position Uncertainty, *Proceedings of MOBILE HCI 2011: 13th International Conference on Human-Computer Interaction with Mobile Devices and Services*, ACM Press, New York, September 2011, pp. 221-230.
  15. Burigat S., Chittaro L., A Mobile Starfield Visualization with Space Compression Capabilities, *Proceedings of MOBILE HCI 2009: 11th International Conference on Human-Computer Interaction with Mobile Devices and Services*, ACM Press, New York, September 2009.
  16. Burigat S., Chittaro L., Parlato E., "Map, Diagram, and Web Page Navigation on Mobile Devices: the Effectiveness of Zoomable User Interfaces with Overviews", *Proceedings of MOBILE HCI 2008: 10th International Conference on Human-Computer Interaction with Mobile Devices and Services*, ACM Press, New York, September 2008, pp. 147-156.
  17. Burigat S., Chittaro L., Gabrielli S., "Visualizing Locations of Off-Screen Objects on Mobile Devices: A Comparative Evaluation of Three Approaches", *Proceedings of MOBILE HCI 2006: 8th International Conference on Human-Computer Interaction with Mobile Devices and Services*, ACM Press, New York, September 2006, pp. 239-246.
  18. Burigat S., Chittaro L., "Visualizing the results of interactive queries for geographic data on mobile devices", *Proceedings of ACM GIS 2005: 13th International Symposium on Advances in Geographic Information Systems*, ACM Press, New York, November 2005, pp. 277-284.
  19. Chittaro L., Burigat S., "Augmenting audio messages with visual directions in mobile guides: an evaluation of three approaches", *Proceedings of MOBILE HCI 2005: 7th International Conference on Human-Computer Interaction with Mobile Devices and Services*, ACM Press, New York, September 2005, pp. 107-114.
  20. Burigat S., Chittaro L., De Marco L., "Bringing dynamic queries to mobile devices: a visual preference-based search tool for tourist decision support", *Proceedings of INTERACT 2005: 10th IFIP International Conference on Human-Computer Interaction*, LNCS 3585, Springer, Berlin, September 2005, pp. 213-226.
  21. Burigat S., Chittaro L., "Location-aware visualization of VRML models in GPS-based mobile guides", *Proceedings of Web3D 2005: 10th International Conference on 3D Web Technology*, ACM Press, New York, April 2005, pp. 57-64.
  22. Chittaro L., Burigat S., "3D location-pointing as a navigation aid in virtual environments", *Proceedings of AVI 2004: 7th International Conference on Advanced Visual Interfaces*, ACM Press, New York, May 2004, pp. 267-274.
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23. Chittaro L., Burigat S., "Location-aware visualization of a 3D world to select tourist information on a mobile device", *Proceedings of the 3rd International Workshop on HCI in Mobile Guides*, Glasgow, UK, September 2004.

### **PARTICIPATION IN RESEARCH PROJECTS**

- ELEVAID: Electronic emergency evacuation aid for aircraft passengers (2013-2017), financed by the US Federal Aviation Administration (FAA)
- Electronic navigation aids for disabled persons in university buildings, financed by the Italian Ministry of University and Research under the 17/1999 law
- International institute for applicable mathematics and information sciences (project number RBIN04M8S8), financed by the Italian Ministry of University and Research under the FIRB program
- Adaptive, Context-aware, Multimedia Guides on Mobile Devices (2005-2007), financed by the Italian Ministry of University and Research under the PRIN program
- WEB-based management and representation of spatial and geographic data (2003-2005), financed by the Italian Ministry of University and Research under the PRIN program
- Raprodyre: Rapid Prototyping and Dynamic Virtual Representation of Clothing - EUREKA Project E! 2324 - UE funded industrial research project

### **ADDITIONAL SCIENTIFIC ACTIVITY**

- Program committee member for Mobile HCI 2011, Mobile HCI 2016, MUM 2016
- Reviewer for international journals: ACM Transactions on Applied Perception, Behaviour & Information Technology, Computer Graphics Forum, IEEE Computer, IEEE Transactions on Visualization and Computer Graphics, Interacting with Computers, Pervasive and Mobile Computing, Virtual Reality
- Reviewer for international conferences: AVI, CHI, EICS, IEEE VIS, INTERACT, Mobile HCI, MUM, NordiCHI, Smart Graphics, UMAP

### **TEACHING ACTIVITY**

- 2016-2017: "Progettazione di Applicazioni Mobili", laurea magistrale in Informatica, laurea magistrale in Comunicazione Multimediale e Tecnologie dell'Informazione, University of Udine
  - 2013-2017: "Complementi di Tecnologie Web", laurea in Tecnologie Web e Multimediali, University of Udine
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- 2009-2016: “Sistemi Mobili e Wireless”, laurea magistrale in Informatica, laurea magistrale in Comunicazione Multimediale e Tecnologie dell'Informazione, University of Udine
  - 2007-2013: “Commercio Elettronico”, laurea specialistica in Statistica e Informatica per la Gestione delle Imprese, laurea in Tecnologie Web e Multimediali, University of Udine
  - 2006-2009: “Sistemi Operativi”, laurea in Tecnologie Web e Multimediali, University of Udine
  - 2004-2008: “Laboratorio di Programmazione”, laurea in Tecnologie Web e Multimediali, University of Udine
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