

# Vassilis Kostakos

## Curriculum Vitae

### CONTACT INFORMATION

University of Oulu  
Department of Computer Science and Engineering  
90014, Oulu  
Finland

vassilis@ee.oulu.fi  
<http://www.ee.oulu.fi/~vassilis>  
Phone: +358 8 553 1011  
Fax: +358 8 553 2612

### EXPERIENCE

- Professor of Computer Engineering**, University of Oulu  
*Department of Computer Science and Engineering* Nov. 2011 - Present
- Adjunct Assistant Professor**, Carnegie Mellon University  
*Human Computer Interaction Institute* Oct. 2007 - Sept. 2011
- Assistant Professor**, University of Madeira, Portugal  
*Madeira Interactive Technologies Institute* Oct. 2007 - Sept. 2011
- Post-doc**, University of Bath, UK  
*Department of Computer Science* Feb. 2005 - Sept. 2007
- Visiting Fellow**, UCL, UK  
*Bartlett School of Architecture* Sept. 2005 - Sept. 2007
- Visiting Fellow**, Hewlett Packard Laboratories  
*Bristol Lab, UK* Sept. 2005 - Sept. 2007
- Visiting Scientist**, UCSD  
*California Institute for Telecommunications and Information Technology* Jun. - Sept. 2007
- Lecturer**, University of Bath, UK  
*Department of Computer Science* Feb. - Oct. 2005
- Consultancy** 2005 - Present  
NSA, Nokia, Vodafone, Airbus, Hutchison, Blyk, Eye, Path Intelligence, SoftWair, Proximity Media, iName, KLP, Moli, Transport for London.

### EDUCATION

- University of Bath, UK*  
**PhD in Computer Science** (Human-Computer Interaction), 2005  
Thesis: A design framework for pervasive computing systems.  
Examination committee: Alan Dix, Hilary Johnson, Eamonn O'Neill (supervisor).
- University of Bath, UK*  
**BSc in Computer Science** (First Class, top 5%), 2001

## AWARDS AND RECOGNITION

- 2012: IBM Open Collaborative Faculty Award
- 2010: IBM Open Collaborative Faculty Award
- 2010: Fellow of the Finland Distinguished Professor Program (Academy of Finland)
- 2010: Mentor for New Scholars Research Grant recipients (Thailand)
- 2009: Invited expert on the W3C Mobile Web Best Practices Working Group
- 2009: Invited jury member for the UBI-Challenge (University of Oulu, Finland)
- 2007: Creativity in Systems Design award (EPSRC, UK)
- 2007: Recipient of a UK / US Science Bridge (SetSquared, UK)
- 2007: Most Valuable Player (West of England Basketball Association, UK)
- 2006: Role Model award in Science (Engineering and Technology Board, UK)
- 2006: Declared as Science Ambassador (STEMNET, UK)
- 2001: Recipient of the Chancellor's Postgraduate Fellowship (University of Bath, UK)
- 2000: Outstanding achievement award in American Football (University of Bath, UK)
- 1998: World University Debate Championship : Judge diploma (Levels 1, 2, 3)
- 1994: 6th place in European mathematics competition (Mathcounts Competition)
- 1994: Winner of BeNeLux mathematics competition (Mathcounts Competition)

## GRANTS

- “UBI Metrics - Multidisciplinary Framework for Evaluating Ubicomp Systems in Real-World Urban Settings”, Academy of Finland, € 660,100, 2011-2014. (Co-PI with Ojala)
- “Novel optical fiber sensors for monitoring the fermentation of Madeira wine”, Portuguese Foundation for Science and Technology, €97,764, 2010-2013. (Co-PI with Pinto, Marques)
- “Human-robot interaction with field robots using augmented reality and interactive mapping”, Portuguese Foundation for Science and Technology, €129,000, 2010-2013. (Co-PI with Ventura, Oakley, Bernardino, Gaspar)
- “Leveraging community content for disaster awareness and emergency response coordination”, IBM Open Collaborative Faculty Award, \$40,000, 2010-2011. (Sole PI)
- “Urban flows and social networks”, Academy of Finland, Fellowship of the Finland Distinguished Professor Program, €600,000, 2010-2012. (PI with Ojala)
- “SPAEN: a software platform for automated enterprise-wide analytics”, Autonomous Region of Madeira Knowledge+ Program, €227,000, 2010-2011. (PI with Chen)
- “Usability evaluation techniques for situated privacy”, Portuguese Foundation for Science and Technology, €50,000, 2010-2013. (Sole PI)
- “Novel sensing techniques for urban transport”, Portugal public transport authority, €30,000, 2010. (Sole PI)
- “WeSP: Web security and privacy”, Portuguese Foundation for Science and Technology, €370,000, 2009-2012. (PI with Sadeh, Cranor, Peha, Catano, Oakley)
- “SINAIS: Sustainable interaction with social networks, context awareness and innovative services”, Portuguese Foundation for Science and Technology, €600,000, 2009-2012. (Co-PI with Nunes, Soibelman, Oakley, Nisi)
- “Casagras: RFID Global Forum”, European Union FP7, €500,000, 2008-2009, European Union FP7. (Invited expert)
- “Creativity in systems design flexible award”, UK Engineering and Physical Sciences Research Council, £3,000, 2007. (PI with Dekoninck)
- “Human factors in mobile malware”, SetSquared UK/US Science bridge, £40,000, 2007-2008. (Co-PI with O’Neill)
- “Cityware: urban design and pervasive systems”, UK Engineering and Physical Sciences Research Council, £1,200,000, 2005-2008. (Recognized researcher with O’Neill, Kindberg, Sloman, Penn).

## INVITED TALKS

- Keynote speech at SIPC (with Percom, Lugano), 2012, Lugano, Switzerland.
- ETH Zurich (Information Management), 2012: Ubiquitous computing and smarter cities.
- University of Zurich (Informatics), 2012: From labs to cities: Mapping the social impact of ubiquitous technologies.
- University of Lugano (Informatics), 2012: From labs to cities: Mapping the social impact of ubiquitous technologies
- IBM TJ Watson, 2011: Crowd-in-the-loop: Towards real-time emergency response using crowd supported analysis of social media.
- University of Athens (Informatics), 2011: Ubiquitous Computing: Moving Interaction Beyond the Desktop and into the City.
- Invited lecture at IEEE ANDESCON, 2010, Bogota, Colombia.
- Panelist at UbiOulu Forum, 2010, Oulu, Finland.
- Keynote speech at I2COMM (with IEEE Latincom), 2010, Bogota, Colombia.
- Keynote speech at the 2nd Open Ubiquitous City seminar, 2010, Oulu, Finland
- Keynote speech at the International Cartographic Association's workshop on geospatial analysis and modeling, 2009, Sweden
- University of Oulu (Computer Science), 2009: Novel sensing techniques for urban transport
- UCL (Bartlett School of Architecture), 2008: Exploring the interplay between physical & digital space
- Cambridge University (Computer Lab), 2008: Understanding spatial and transpatial networks
- Carnegie Mellon University (HCII) 2007: Experience with an urban deployment of Bluetooth
- Oxford University (Physics) 2007: Brief encounter networks
- UCSD (Calit<sup>2</sup>), 2007: Experiences with an urban deployment of Bluetooth
- Nokia, Helsinki, 2007: Cityware for Facebook
- Vodafone R&D, UK, 2007: Bluetooth and social networks
- UCL (Bartlett School of Architecture) 2007: City-ware: space, technologies & people
- Dorkbot & Spike Media, UK, 2007: Pervasive Computing 1.0
- UCL (Computer Science), 2007: Experiences with urban deployment of Bluetooth
- Warwick University, 2007: Understanding mobility and encounter in the digital landscape
- Cambridge University (Computer Lab), 2006: Cityware and Bluetooth tracking
- Microsoft Research, Cambridge, 2006: Cityware: Urban design and pervasive systems
- Hewlett-Packard Labs, Bristol, 2006: A design framework for pervasive systems
- Lancaster University (Computing), 2005: Pervasive computing: Interaction and design
- Imperial College (Engineering & Computing), 2003: Introducing pervasive systems to society

## MEDIA MENTIONS

- CanalUP: Facebook is far from dying (in Portuguese) (30/6/2011)
- New Scientist: Earthquake? Terrorist bomb? Call in the AI (18/5/2011)
- Hack-a-day: Wine cask sensor suite (4/8/2010)
- Scientific American: Manipulation of the Crowd: How Trustworthy Are Online Ratings? (1/7/2010)
- MIT Technology Review: Can You Trust Crowd Wisdom? (16/9/2009)
- SIC: Sinais project: Sensors in public transport anticipate users' needs (8/9/2009)
- The Guardian: Bluetooth is watching (21/7/2008)
- New Scientist: Bluetooth provides spies with a window into your life (30/4/2008)
- Slashdot: Bluetooth Surveillance Tested In the UK (22/4/2008)
- New Scientist: Towards the Facebook phone (8/2/2008)
- BBC Radio: Live interview on Drivetime show (20/8/2007)

- BBC News: Bluetooth helps Facebook friends (16/08/2007)
- BBC News: Futuristic phones tested in city (22/2/2006)
- Unwired magazine: Cityware for Facebook (09/2007)
- The Register: Boffins wrestle with future in Roman Bath (20/2/2006)
- TVNZ: Historic city hosts modern experiment (21/2/2006)

## TEACHING

- Spring 2012: Information Networks Service Techniques
- Fall 2010: Social Web
- Fall 2010: HCI Project II
- Spring 2010: HCI Project I
- Spring 2010: Research Topics in Ubiquitous Computing
- Fall 2009: Social Web
- Spring 2009: Research Topics in Ubiquitous Computing
- Spring 2009: Programing Usable Interfaces
- Fall 2008: Social Web
- Spring 2008: Software Architectures for User Interfaces
- Spring 2005: Introduction to Software Engineering
- Spring 2005: Project Management

## STUDENTS

### CURRENT STUDENTS

- Jayant Venkatanathan (Madeira, PhD: 2009-ongoing, co-supervised by Evangelos Karapanos)
- Jakob Rogstadius (Madeira, PhD: 2010-ongoing, co-supervised by Evangelos Karapanos)
- Denzil Ferreira (Oulu, PhD: 2012-ongoing, co-supervised by Anind Dey)
- Jorge Goncalves (Oulu, PhD: 2012-ongoing)

### PAST STUDENTS

- Tiago Camacho (Research Assistant: 2009-2011)
- Fernando Rodrigues (MSc: 2010-2011). Public display tweeting.
- Sandra Perdomo (MSc: 2010-2011). Visualising privacy on social media.
- Nelson Serrao (MSc: 2010-2011). Combating shoulder surfing.
- Vitor Ferreira (MSc: 2010-2011). Brain Computer Interfaces.
- Jorge Concalves (MSc: 2010-2011). Narrowcasting on social media.
- Fransisco Andrade (MSc: 2010-2011). Eliciting community feedback on social media.
- Maria Fritas, Mark Leun, Ricardo Jesus, Mike Pennisi (MHCI capstone project: 2009-2010). Distributed collaboration across smart environments, co-supervised by Lucia Terrenghi (Vodafone)
- Amilcar Rodrigues (MSc: 2009-2010). Combating shoulder-surfing
- Bernardo Reynolds (MSc: 2009-2010). Twitter privacy controls, co-supervised by Isidro Maya Jariego (U. Sevilla)
- Denzil Ferreira (MHCI: Independent study, 2010 Fall). Platform for mobile context sensing, co-supervised by Anind Dey, (Carnegie Mellon University)
- Renato (Celso) Cardoso (MSc: 2009-2010 U. Porto). Email Visualisation, co-supervised by Paula Silva, (Fraunhofer Portugal)
- Salvador Faria (MSc: 2009-2010). An Online Platform for Real-Time Sensor Data Collection, Visualization, and Sharing, co-supervised by Marques Jose Carlos (U. Madeira)

- Paulo Teixeira (MSc: 2009-2010). Smart Signs, co-supervised by Maria Lijding (University of Twente/CTIT)
- Andre Doria, World of Warcraft social interactions (MHCI: Independent study, 2009 Fall)
- Mariana Lopez, World of Warcraft social interactions (MHCI: Independent study, 2009 Fall)
- Josh Coe, PonchaDate (MHCI: Independent study, 2009 Fall)
- Jernej Zorko, Sensor middleware (Independent study, 2009-2010), Erasmus student (Slovenia)
- Ales Preac, Twitter visual search (Independent study, 2009-2010), Erasmus student (Slovenia)
- Robert Dukaric, PonchaDate (Independent study, 2009-2010), Erasmus student (Slovenia)
- Tiago Camacho (MSc: 2008-2009, PhD:2009-2011). Proximity Sensing and Context-Aware Content Dissemination.

## PROFESSIONAL ACTIVITIES

### ORGANIZATION & EDITORIALS

- Guest Editor, special issue of IJHCS on Social Networks and Ubiquitous Interactions (2012)
- Organiser, Ubicomp 2012 workshop on Ubiquitous Mobile Instrumentation
- Organiser, Ubicomp 2012 workshop on Computer Mediated Social Offline Interactions
- Organiser, WWW 2012 workshop on Social web for disaster management
- Organiser, Ubicomp 2011 workshop Urban Sensoria
- Associate Chair, INTERACT 2011
- Demo chair, TEI 2011
- Workshops chair, Ubicomp 2010
- Organiser, NET-SCIP 2010 workshop on Security
- Organiser, NetSci 2008 workshop on Social Networks and Ubiquitous Computing
- Guest Editor, special issue of Interacting with Computers on the social implications of emerging technologies, issue May 2005, 17(4).
- Organiser, CHI 2005 workshop UbiSoc.
- Technical chair, BCS HCI 2003.

### TECHNICAL PROGRAM COMMITTEES

- ICWSM'12 - International AAAI Conference on Weblogs and Social Media
- SIPC'12 - IEEE International Workshop on Social Implications of Pervasive Computing
- MUM 2011, 2012 - International Conference on Mobile and Ubiquitous Multimedia
- HotPlanet 2009, 2010, 2011 - the ACM International Workshop on Hot Topics of Planet-scale Mobility Measurements
- SCA2011 - International Conference on Social Computing and Applications
- IPSoN11 - Workshop on the Integration of Physical and Social-Network Sensing and Mining
- SNAA 2011 - Workshop on Social Network Analysis in Applications
- Interact 2011 Associate Chair
- Simplex 2011 - Simplifying Complex Networks for Practitioners
- Pervasive 2011 workshop selection committee
- SOTICS 2011 - The First International Conference on Social Eco-Informatics
- SocialComNet 2011 - International Workshop on Social Computing, Network, Services
- C&T 2010 - International Conference on Communities & Technologies
- Digital Cities 7
- EC 2010: the 1st International Workshop on Enterprise Crowdsourcing
- SocialCom 2010: IEEE International Conference on Social Computing

- U-NET'10: Workshop on User-provided Networking, 2010
- PerCom'10 work in progress: IEEE International Conference on Pervasive Computing and Communications
- FSKD'10: International Conference on Fuzzy Systems and Knowledge Discovery
- WEIA'09: Workshop on Emerging Internet Applications
- U-NET'09: Workshop on User-provided Networking
- International Workshop on Social Interaction and Mundane Technologies, 2008
- W3C workshop on the Future of Social Networking, 2008
- ACM Symposium on Applied Computing, track on Ubiquitous Computing, 2007

#### JOURNAL REVIEWING

- Interacting with Computers
- IEEE Pervasive
- IEEE Transactions on Knowledge and Data Engineering
- IEEE Transactions on Dependable and Secure Computing
- IEEE Transactions on Parallel and Distributed Computing
- The Computer Journal
- Geographical Analysis
- Computers, Environment and Urban Systems
- International Journal of Arts and Technology
- International Journal of Health Geographics
- Journal of Systems and Software
- International Journal of Human-Computer Studies
- Transportation Research Part C
- Transactions on Mobile Computing
- Information Processing Letters
- Systems Man and Cybernetics Part B
- Journal of Urban Technology
- Personal and Ubiquitous Computing

#### CONFERENCE REVIEWING

- ACM CHI
- ACM CSCW
- ACM C&T
- ACM UbiComp
- ACM TEI
- MobileHCI
- IEEE SocialCom
- IEEE Infocom
- Interact (Associate Chair 2011)
- Pervasive
- ACM SAC
- OzCHI

#### GRANT REVIEWING

- EU FP7
- EPSRC UK

- National ICT Australia
- FWF Austrian Science Fund

#### MSC THESIS COMMITTEES

- Filipe Quintal (MSc 2009). An inexpensive solution for real-time image and video stitching
- Roberto Sousa (MSc 2009). Glaze: A visualization framework for mobile devices

#### ADMINISTRATION

- Assistant Director, MediaTeam research group, University of Oulu (Oct 2011-)
- Vice-president, Madeira Interactive Technologies Institute (Jun-Oct 2011)
- Webmaster, University of Bath, Department of Computer Science (2002-2005)
- Webmaster, HCI Group, University of Bath, Department of Computer Science, (2001-2006)
- Communications Committee, British Computer Society HCI Group (2001-2004)
- Organizer for Living Science 2008 Expo (Lisbon), Carnegie Mellon / Portugal stand: 2008.

#### PROFESSIONAL MEMBERSHIPS

- ACM
- BCS
- W3C: Invited expert Mobile Web Best Practices Working Group (2008-Present)
- Steering Committee, Thematic Network on Security and Critical Infrastructure Protection (NET-SCIP)

#### PUBLICATIONS

##### JOURNALS

- [1] Ojala, T., Kostakos, V., Kukka, H., Heikkinen, T., Linden, T., Jurmu, M., Hosio, S., Kruger, F., Zanni, D. (to appear). Multipurpose Interactive Public Displays in the Wild: Three Years Later. *IEEE Computer*.
- [2] Ferreira, D., Kostakos, V., Dey, A. (to appear). Lessons Learned From Large-Scale User Studies: Using Android Market As A Source Of Data. *International Journal of Mobile HCI*.
- [3] Kukka, H., Kostakos, V., Ojala, T., Ylipulli, J., Suopajarvi, T., Jurmu, M., Hosio, S. (to appear). This Is Not Classified: Everyday Information Seeking and Encountering in Smart Urban Spaces. *Personal and Ubiquitous Computing*.
- [4] Kostakos, V. (2011). The challenges and opportunities of designing pervasive systems for deep-space colonies. *Personal and Ubiquitous Computing*, 15(5):479-486.
- [5] Kostakos, V. and Kostakos, P. (2010). Inferring social networks from physical interactions: A feasibility study. *International Journal of Pervasive Computing and Communications*, 6(4), 423-431.
- [6] Kostakos, V., O'Neill, E., Penn, A., Roussos, G., Papadongonas, D. (2010). Brief encounters: sensing, modeling and visualizing urban mobility and copresence networks. *ACM Transactions on Computer Human Interaction*, 17(1):1-38.
- [7] Kostakos, V. (2009). Temporal graphs. *Physica A: Statistical Mechanics and its Applications*, 388(6): 1007-1023.
- [8] Roussos, G. and Kostakos, V. (2009). RFID in Pervasive Computing: State-of-the-art and Outlook. *Pervasive and Mobile Computing*, 5:110-131.
- [9] Kostakos, V., Nicolai, T., Yoneki, E., O'Neill, E., Kenn, H. and Crowcroft, J. (2009). Understanding and measuring the urban pervasive infrastructure. *Personal and Ubiquitous Computing*, Springer, 13(5): 355-364.
- [10] Kostakos, V., O'Neill, E. and Penn, A. (2006). Architectural Space, Interaction Space and Information Spheres: Designing Urban Pervasive Systems. *IEEE Computer*, 39(9):52-59.

- [11] O'Neill, E., Kaenampornpan, M., Kostakos, V., Warr, A. and Woodgate, D. (2005). Can we do without GUIs? Gesture and speech interaction with a patient information system. *Personal and Ubiquitous Computing*, Springer, 10(5):269-283.
- [12] Kostakos, V., O'Neill, E., Little, L., Sillence, E. (2005). The social implications of emerging technologies. *Interacting with Computers*, 17(5):475-483.

#### BOOK CHAPTERS

- [13] Salvador, F., Kostakos, V. (to appear). A scalable sensor middleware for social end- user programming. In T. Lovett and E. O'Neill (Eds.), *Mobile Context Awareness*. Springer.
- [14] Kostakos, V. (2010). Space Syntax and pervasive systems. In B. Jiang and X.A. Yao (Eds.), *Geospatial Analysis and Modeling of Urban Structure and Dynamics* (pp. 31-52), Springer, New York.
- [15] Fatah gen. Schieck, A., Kostakos, V., Penn, A. (2009). Exploring the Digital Encounters in the Public Arena. In K. Willis, G. Roussos, K. Chorianopoulos, M. Struppek (Eds.), *Shared Encounters* (pp. 179-198), Springer, Germany.
- [16] Kostakos, V. and O'Neill E. (2008). Cityware: Urban Computing to Bridge Online and Real-world Social Networks. In M. Foth (Ed.), *Handbook of Research on Urban Informatics: The Practice and Promise of the Real-Time City* (pp. 195-204), Hershey, PA: Information Science Reference, IGI Global.
- [17] Kostakos, V. and O'Neill, E. (2006). Interacting with mobile and pervasive systems. In I. K. Ibrahim (Ed.), *Handbook of research on mobile multimedia* (pp. 71-85). Hershey: Idea Group Inc, ISBN 1591408660.

#### CONFERENCE PROCEEDINGS

- [18] Venkatanathan, J., Karapanos, E., Kostakos, V., Goncalves, J. (2012). Network, Personality and Social Capital. In proceedings of ACM Web Science, to appear.
- [19] Hosio, S., Kostakos, V., Kukka, H., Jurmu, M., Riekkki, J., Ojala, T. (2012). From School Food to Skate Parks in a few Clicks: Using Public Displays to Bootstrap Civic Engagement of the Young. In Proceedings of Pervasive, Newcastle, UK.
- [20] Ojala, T. and Kostakos, V. (2011). UBI Challenge: Research Coopetition on Real-World Urban Computing. In proceedings of Mobile and Ubiquitous Multimedia 2011, Beijing, China, pp. 205-208.
- [21] Kostakos, V., Venkatanathan, J., Reynolds, B., Sadeh, N., Toch, E., Shaikh, S. A., Jones, S. (2011). Who's your best friend? Targeted privacy attacks in location-sharing social networks. In Proceedings of Ubicomp 2011, Beijing, China, pp. 177-186.
- [22] Ferreira, D., Dey, A., Kostakos, V. (2011). Understanding Human-Smartphone Concerns: A Study of Battery Life. In Proceedings of Pervasive, San Fransisco, USA, pp. 19-33.
- [23] Rogstadius, J., Kostakos, V., Kittur, A., Smus, B., Laredo, J., and Vukovic, M. (2011). An Assessment of Intrinsic and Extrinsic Motivation on Task Performance in Crowdsourcing Markets. In Proceedings of the AAAI Conference on Weblogs and Social Media, Barcelona, Spain, pp. 321-328.
- [24] Venkatanathan, J., Ferreira, D., Benisch, M., Lin, J., Karapanos, E., Kostakos, V., Sadeh, N., Toch, E. (2011). Improving users' consistency when recalling location sharing preferences. In proceedings of INTERACT, Lisbon, Portugal, pp. 380-387.
- [25] Kukka, H., Kruger, F., Kostakos V., Ojalam, T., and Jurmu, M. (2011). Information to Go: Exploring In-Situ Information Pick-up "In the Wild". In Proceedings of INTERACT, Lisbon, Portugal, pp. 487-504.
- [26] Reynolds, B., Venkatanathan, J., Goncalves, J., and Kostakos, V. (2011). Sharing Ephemeral Information in Online Social Networks: privacy perceptions and behaviours. In Proceedings of INTERACT, Lisbon Portugal, pp. 204-215.
- [27] Lyra, O., Karapanos, E., Kostakos, V. (2011). Intelligent Playgrounds: Measuring and affecting social inclusion in schools. In proceedings of INTERACT, Lisbon, Portugal, pp. 560-563.

- [28] Bianchi, A., Oakley, I., Kostakos, V., Kwon, D.S. (2011). The Phone Lock: Audio and Haptic shoulder-surfing resistant PIN entry methods. In Proceedings of ACM Tangible and Embedded Interaction, pp. 197-200.
- [29] Kostakos, V. (2011). Network science as a foundation for metrics, models and theories of large-scale pervasive systems. NSF workshop on Pervasive Computing at Scale (PeCS), Seattle, Washington, 27-28 January.
- [30] Kostakos, V., Camacho, T. and Mantero, C. (2010). Wireless detection of end-to-end passenger trips on public transport buses. International IEEE Conference on Intelligent Transportation Systems, pp. 1795-1800.
- [31] Camacho, T., Kostakos, V., and Mantero, C. (2010). A Wireless Infrastructure for Delivering Contextual Services and Studying Transport Behavior. In proceedings of International IEEE Conference on Intelligent Transportation Systems, pp. 943-948.
- [32] Kostakos, V. and Venkatanathan, J. (2010). Making friends in life and online: Equivalence, micro-correlation and value in spatial and transpatial social networks. In proceedings of IEEE SocialCom, Minneapolis, USA, pp. 587-594.
- [33] Wagner, D., Lopez, M., Doria, A., Pavlyshak, I., Kostakos, V., Oakley, I., Spiliotopoulos, T. (2010). Hide And Seek: Location Sharing Practices With Social Media. In Proceedings of the MobileHCI conference, pp. 55-58.
- [34] Kostakos, V. and Oakley, I. (2009). Designing Trustworthy Situated Services: an Implicit and Explicit Assessment of Locative Images' Effect on Trust. In Proceedings of the conference on Human factors in computing systems (CHI 2009), Boston, USA, pp. 329-332.
- [35] van Leeuwen, J.P., Oakley, I., Nunes, N.J., Nisi, V., and Kostakos, V. (2009). Sensory Social Networks to Motivate Sustainable Behaviour. In Proceedings of the 12th International EuropIA Conference, Paris, France, March 18-20, pp. 45-55.
- [36] Kostakos, V. (2009). Is the crowd's wisdom biased? A quantitative analysis of three online communities. In Proceedings of Computational Science and Engineering, August 29-31, Vancouver, Canada, 251-255.
- [37] O'Neill, E. and Kostakos, V. (2008). Measuring urban mobility and encounter. In Proceedings of Measuring Behavior 2008, The Netherlands, August 26-29, pp. 66-67.
- [38] Kindberg, T., O'Neill, E., Bevan, C., Kostakos, V., Stanton Fraser, D.S., Jay, T. (2008). Measuring Trust in Wi-Fi Hotspots. In Proceedings of the conference on Human factors in computing systems (CHI 2008), Florence, Italy, pp. 173-182.
- [39] da Silva, M.L., Kostakos, V. and Matsumoto, M. (2008). Improving emergency response to mass casualty incidents. In Proceedings of the IEEE International Conference on Pervasive Computing and Communications (Percom 2008), 17-21 March, Hong Kong, pp. 256-259.
- [40] da Silva, M.L., Kostakos, V. and Matsumoto, M. (2007). Study on the Use of Pervasive Technology to Improve the Emergency Response to Mass Casualty Incidents. In Proceedings of the GITS GITI Forum, October 10, Tokyo, Japan.
- [41] Kostakos, V. and O'Neill, E. (2007). Quantifying the effects of space on encounter. In Proceedings of the Space Syntax Symposium 2007, Istanbul, pp. 9701-9709.
- [42] O'Neill, E., Kostakos, V., Kindberg, T., Fatah gen. Schiek, A., Penn, A., Stanton Fraser, D. and Jones, T. (2006). Instrumenting the city: developing methods for observing and understanding the digital cityscape. In Proceedings of UbiComp 2006, Lecture notes in Computer Science 4206, Springer, pp. 315-332.
- [43] Fatah gen. Schieck, A., Penn, A., Kostakos, V., O'Neill, E., Kindberg, T., Stanton Fraser, D., Jones, T. (2006). Design tools for pervasive computing environments. In Proceedings of Design and Decision Support Systems in Architecture and Urban Planning (DDSS 2006), 2-7 July 2006, Springer Netherlands, pp. 467-486.
- [44] Kostakos, V., O'Neill, E., Shahi, A. (2006). Building Common Ground for Face to Face Interactions by Sharing Mobile Device Context. In Proceedings of the workshop on Location and Context Awareness (LOCA 2006), Dublin, Ireland. Lecture Notes in Computer Science 3987, Springer, pp. 222-238.

- [45] O'Neill, E., Woodgate, D., and Kostakos, V. (2004). Easing the wait in the Emergency Room: building a theory of public information systems. In Proceedings of the ACM Designing Interactive Systems 2004 (DIS 2004), Boston, MA., August 2004, pp. 17-25.
- [46] Kostakos, V. and O'Neill, E. (2004). Pervasive Computing in Emergency Situations. In Proceedings of The Annual Hawaii International Conference on System Sciences (HICSS 2004), January 5-8, 2004, Computer Society Press, 2004.
- [47] Kostakos, V. and O'Neill, E. (2003). A directional Stroke Recognition Technique for Mobile Interaction in a Pervasive Computing World. In Proceedings of People and Computers XVII, Bath, UK: Springer, pp. 197-206.

#### WORKSHOPS AND POSTERS

- [48] Rogstadius, J., Kostakos, V., Laredo, J. and Vukovic, M. (2011). A real-time social media aggregation tool: Reflections from five large-scale events. In ECSCW 2011, Workshop CSCWSmart? Collective Intelligence and CSCW in Crisis Situations, Aarhus, Denmark.
- [49] Rogstadius, J., Kostakos, V., Laredo, J. and Vukovic, M. (2011). Improving Situational Awareness in Emergencies through Crowd Supported Analysis of Social Media. Poster presented at ECSCW 2011, Aarhus, Denmark.
- [50] Ojala, T., and Kostakos, V. (2011). Driving Innovation in Urban Computing With a Community Testbed. In adjunct proceedings of Pervasive 2011, workshop on Pervasive Urban Applications (PURBA). California, USA.
- [51] Venkatanathan, J., and Kostakos, V. (2011). Privacy in a networked world: effects of reciprocity and imitation on location sharing. In adjunct proceedings of the conference on Human factors in computing systems (CHI 2011), workshop on Networked Privacy. Vancouver, Canada.
- [52] Rogstadius, J., Kostakos, V., Laredo, J., and Vukovic, M. (2011). Towards Real-time Emergency Response using Crowd Supported Analysis of Social Media. In adjunct proceedings of the conference on Human factors in computing systems (CHI 2011), Workshop on Crowdsourcing and Human Computation: Systems, Studies and Platforms. Vancouver, Canada.
- [53] Ojala, T., Kostakos, V., and Kukka, H. (2011). It's a Jungle Out There: Fantasy and Reality of Evaluating Public Displays "in the Wild". In adjunct proceedings of the conference on Human factors in computing systems (CHI 2011), Workshop on Large Displays in Urban Life: from Exhibition Halls to Media Facades. Vancouver, Canada.
- [54] Camacho, T., Quintal, F., Scott, M., Kostakos, V., and Oakley, I. (2011). Towards Egocentric Fuel Efficiency Feedback. In adjunct proceedings of the conference on Human factors in computing systems (CHI 2011), Workshop on Persuasion, Influence, Nudge & Coercion through mobile devices. Vancouver, Canada.
- [55] Bianchi, A., Oakley, I., Lee, J.K., Kwon, D.S., Kostakos, V. (2011). Haptics for Tangible Interaction: A Vibro-Tactile Prototype. ACM Tangible and Embedded Interaction, pp. 283-284.
- [56] Smus, B. and Kostakos, V. (2010). Running Gestures: Hands-free Interaction During Physical Activity. Adjunct proceedings of Ubicomp 2010, Copenhagen, Denmark, pp. 433-434.
- [57] Ferreira, D., Kostakos, V., Rogstadius, J. and Venkatanathan, J. (2010). Design, Prototyping and Evaluation of Ambient Media: Lessons Learned from the Ambient Notifier. Adjunct proceedings of MobileHCI, International Workshop on Tool-Support for Mobile and Pervasive Application Development (TSM PAD 2010), September 7-10, Lisbon, Portugal.
- [58] Catano, N., Kostakos, V., Oakley, I. (2009). Poporo: A Formal Framework for Social Networking. 3rd International Workshop on Formal Methods for Interactive Systems (FMIS).
- [59] Kostakos, V. and O'Neill, E. (2008). Human-in-the-loop: rethinking security in mobile and pervasive systems. In Extended Abstracts of the conference on Human factors in computing systems (CHI 2008), Florence, Italy, pp. 3075-3080.
- [60] Kostakos, V. and O'Neill, E. (2008). Urban encounters: the game of real life. In Extended Abstracts of the conference on Human factors in computing systems (CHI 2008), Florence, Italy, pp. 3381-3386.

- [61] Kostakos, V., O'Neill, E. and Jones, S. (2008). Social Networking 2.0. In Extended Abstracts of the conference on Human factors in computing systems (CHI 2008), Florence, Italy, pp. 3555-3560.
- [62] Kostakos, V. and O'Neill, E. (2008). Capturing and visualising Bluetooth encounters. In Adjunct Proceedings of the conference on Human factors in computing systems (CHI 2008), workshop on Social Data Analysis, Florence, Italy.
- [63] Fatah gen Schiek, A. and Kostakos, V. (2007). Exploring digital encounters in the city. In Adjunct Proceedings of the conference on Human factors in computing systems (CHI 2007), workshop on Shared Encounters, San Jose, CA, April 29.
- [64] Kostakos, V. and O'Neill, E. (2007). NFC on mobile phones: issues, lessons and future research. In Adjunct Proceedings of the Fifth IEEE International Conference on Pervasive Computing and Communications (Percom 2007), March 19-23, Pervasive RFID/NFC Technology and Applications Workshop (Pertec 2007). White Plains, NY, pp. 367-370.
- [65] Coroama, V., Kostakos, V., Magerkurth, C. and de Vallejo, I.L. (2005). UbiSoc 2005: first international workshop on social implications of ubiquitous computing. In Adjunct Proceedings of the conference on Human factors in computing systems (CHI 2005), ACM Press, pp. 2111-2112.
- [66] Kostakos, V. and O'Neill, E. (2005). A space oriented approach to designing pervasive systems. In Proceedings of the 3rd UK-UbiNet Workshop, 9-11 February 2005, University of Bath, UK.
- [67] Kaenampornpan, M., O'Neill, E., Kostakos, V. and Warr, A. (2004). Classifying Context Classifications: an Activity Theory Perspective. In Proceedings of the 2nd UK-UbiNet Workshop, 5-7th May 2004, University of Cambridge, UK.
- [68] Garzonis, S., O'Neill, E., Kostakos, V., Kaenampornpan, M., and Warr, A. (2004). A Novel Approach for Identification and Authentication of Users in a Pervasive Environment. In Proceedings of the 2nd UK-UbiNet Workshop, University of Cambridge, UK.
- [69] Kostakos, V. and O'Neill, E. (2004). Designing Pervasive Systems for Society. In Adjunct Proceedings of the Second International Conference on Pervasive Computing (Pervasive 2004), April 18-23, First International Workshop on Sustainable Pervasive Computing. Vienna, Austria.
- [70] Kostakos, V. and O'Neill, E. (2004). Extending Traditional Design approaches for Pervasive Computing. In Adjunct Proceedings of PREP2004, 5-7th April, University of Hertfordshire, UK.
- [71] Kostakos, V. and O'Neill, E. (2003). Introducing Pervasive Computing to Society. In Proceedings of the 1st UK-UbiNet Workshop, 25-26th September 2003, Imperial College, London, UK.

#### OTHERS

- [72] Kostakos, V. (2012). Training users vs. training soldiers: experiences from the battlefield. *Communications of the ACM*, 55(3):33-35.
- [73] Kostakos, V. (2009). An empirical study of spatial and transpatial social networks using Bluetooth and Facebook. arXiv:0910.4292.
- [74] Kostakos, V. (2009). Is the crowd's wisdom biased? A quantitative assessment of three online communities. arXiv:0909.0237.
- [75] Kostakos, V. (2008). Bluetooth monitoring can bring many benefits. *The Guardian*, July 21st, 2008.
- [76] Kostakos, V. (2008). Towards sustainable transport: wireless detection of passenger trips on public transport buses. arXiv:0806.0874.
- [77] Kostakos, V. and O'Neill, E. (2008). Size matters: performance declines if your pixels are too big or too small. arXiv:0804.3103.
- [78] Kostakos, V. (2008). The privacy implications of Bluetooth. arXiv:0804.3752.
- [79] Kostakos, V. and Kostakos, P. (2008). Intelligence gathering by capturing the social processes within prisons. arXiv:0804.3064.
- [80] Kostakos, V. and Kostakos, P. (2007). Social Network Analysis: Real world methodological challenges. *ESRC Standing Group on Organised Crime Newsletter*, 6(1):7-9.

- [81] Kostakos, V., O'Neill, E., Penn, A. (2007). Brief encounter networks. arXiv:0709.0223.
- [82] Kostakos, V. (2007). Prepare for Ubicomp's judgement day. *Communications of the ACM*, 50(2):13.
- [83] Kostakos, P. and Kostakos, V. (2006). Criminal group behaviour and operational environments. *ESRC Standing Group on Organised Crime Newsletter*, 5(2):6-7.
- [84] Kostakos, V. (2005). A design framework for pervasive computing systems. PhD Thesis, University of Bath, UK. Technical Report CSBU2005-02, ISSN 1740-9497.