

Journal articles

1. Haukipuro, L., Väinämö, S. & Arhippainen, L. (2014). Living Lab as One-Stop-Shop in the Development of Public Services. *Interdisciplinary Studies Journal, A Special Issue on Smart Cities*, vol. 3, no. 4 (ISSN 1799-2710).
2. Pakanen, M., Arhippainen, L. and Hickey, S. (2013). Designing for 3D User Experience in Tablet Context - Design and Early Phase User Evaluation of Four 3D GUIs. *International Journal on Advances in Intelligent Systems*, ISSN 1942-2679. vol. 6, no. 3 & 4, year 2013. pp. 266-278.
http://www.iariajournals.org/intelligent_systems/.

Conference papers (short and long, double-blind peer review)

3. Pakanen, M. & Arhippainen, L. (2014) User Experiences with Web-Based 3D Virtual Travel Destination Marketing Portals – The Need for Visual Indication of Interactive 3D Elements. In *Proc. OZCHI, ACM Press (2014)*.
4. Ryymin, T., Rantakokko, A., Mattila, P. & Arhippainen, L. (2014) Developing Future 3D Virtual Learning Environments for High School and Vocational Education
5. Haukipuro, L., Väinämö, S. & Arhippainen, L. (2014). Citizen and Employee Involvement in Public Service Development Through User Driven Methods. In *Proc. Engineering, Technology and Innovation (ICE), 2014 International ICE Conference, 23-25 June, Bergamo, Italy*.
6. Forest, F., Mallein, P. and Arhippainen, L. Paradoxical User Acceptance of Ambient Intelligent Systems - Sociology of User Experience Approach. In *Proc. Academic MindTrek Conference, ACM Press (2013), 211-218*.
7. Arhippainen, L., and Pakanen, M. (2013). Utilizing Self-Expression Template Method in User Interface Design - Three Design Cases. In *Proc. Academic MindTrek Conference, ACM Press (2013), 80-86*.
8. Arhippainen, L., Hickey, S., Pakanen, M. and Karhu, A. (2013). User Experiences of Service Applications on Two Similar 3D UIs with Different 3D Space Contexts. In *Proc. Academic MindTrek Conference, ACM Press (2013), 95-98*.
9. Pakanen, M., Arhippainen, L., Hickey, S., and Karhu, A. (2013). Visual Indication of Interactive 3D Elements in 3D Virtual Environments. In *Proc. Academic MindTrek Conference, ACM Press (2013), 1-4*.
10. Koskela, T., Arhippainen, L., Pouke, M., Karhu, A., and Hickey, S. (2013) User Experiences in ThrowIt: a Natural UI for Sharing Objects between Mobile Devices. In *Proc. IEEE 7th International Conference on Next Generation Mobile Apps, Services and Technologies (NGMAST), IEEE Press (2013), 75-50. DOI 10.1109/NGMAST.2013.22*
11. Pakanen, M., Arhippainen, L., Vatjus-Anttila, J.H. and Pakanen, O-P. (2013). Visual Indication While Sharing Items from a Private 3D Portal Room UI to Public Virtual Environments. In *Proc 14th IFIP TC 13 International Conference, Cape Town, South Africa, September 2-6, 2013. Kotzé, P., Marsden, G., Lindgaard, G. Wesson, J. Winckler, M. (Eds.): INTERACT 2013. LNCS Volume 8120, 2013, Part IV. 737-744*.
12. Hickey, S., Karhu, A., Hyvärinen, J., Arhippainen, L. (2013). Interaction with Services using an Augmented Reality User Interface. In *Proc. 15th International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI), August 27-30, Munich, Germany. ACM Press (2013), 456-459*.

13. Hickey, S., Arhippainen, L., Vajus-Anttila, J.H. and Pakanen, M (2013). User Experience Study of Concurrent Virtual Environments with 2D Tab and 3D Portal UIs. In Proc. 19th ICE Conference, June 24-26, the Hague, the Netherlands.
14. Arhippainen, L., Pakanen, M. and Hickey, S. (2013). Towards a 3D User Interface in a Tablet Device Context - An iterative Design and Evaluation Process. In Proc. 6th International Conference on Advances in Computer-Human Interactions (ACHI), ThinkMind Press (2013), 47-52.
15. Arhippainen, L., Pakanen, M. and Hickey, S. (2013). Studying Depth in a 3D User Interface by a Paper Prototype as a Part of the Mixed Methods Evaluation Procedure. Early Phase User Experience Study. In Proc. 6th International Conference on Advances in Computer-Human Interactions (ACHI), ThinkMind Press (2013), 35-40.
16. Pakanen, M., Arhippainen, L. and Hickey, S. (2013). Studying Four 3D GUI Metaphors in Virtual Environment in Tablet Context - Visual Design and Early Phase User Experience Evaluation. In Proc. 6th International Conference on Advances in Computer-Human Interactions (ACHI), ThinkMind Press (2013), 41-46.
17. Sunnari, M., Arhippainen, L. Pakanen, M. & Hickey, S. (2012). Studying User Experiences of Autostereoscopic 3D Menu on Touch Screen Mobile Device. In Proc. 25th Annual Conference of the Australian Computer-Human Interaction Special Group (OZCHI), ACM Press (2012), 558-561.
18. Hickey, S., Pakanen, M., and Arhippainen, L. (2012). A 3D UI for Service Multitasking in a 3D City Map. In Proc. 25th Annual Conference of the Australian Computer-Human Interaction Special Group (OZCHI), ACM Press (2012), 208-211.
19. Pouke, M., Karhu, A., Hickey, S. & Arhippainen, L. (2012). Gaze Tracking and Non-Touch Gesture Based Interaction Method for Mobile 3D Virtual Spaces. In Proc. 25th Annual Conference of the Australian Computer-Human Interaction Special Group (OZCHI), ACM Press (2012), 505-512.
20. Arhippainen, L., Pakanen, M. & Hickey, S. (2012). Designing 3D Virtual Music Club Spaces by Utilizing Mixed UX Methods: From Sketches to Self-Expression Method. In Proc. Academic MindTrek Conference, ACM Press (2012), 178-184.
21. Pakanen, M., Arhippainen, L. & Hickey, S. (2012). Design and Evaluation of Icons for 3D GUI on Tablets. In Proc. Academic MindTrek Conference, ACM Press (2012), 203-206.
22. Salo, K., Arhippainen, L. & Hickey, S. (2012). Design Guidelines for Hybrid 2D/3D User Interfaces on Tablet Devices - A User Experience Evaluation. In Proc. 5th International Conference on Advances in Computer-Human Interactions (ACHI), ThinkMind Press (2012), 180-185.
23. Arhippainen, L., Pakanen, M., Hickey, S. and Mattila, P. (2011). User Experiences of 3D Virtual Learning Environment. In Proc. 15th MindTrek Conference, ACM Press (2011), 222-227.
24. Arhippainen, L. & Hickey, S. (2011). Classifying Music User Groups and Identifying Needs for Mobile Virtual Music Services. Proc. 15th MindTrek Conference, ACM Press (2011), 191-196.
25. Arhippainen, L. (2006) Adaptive Mobile Services: User Experiences and Design Parameters. The I International Conference on Multidisciplinary Information Sciences and Technologies, InSciT2006. (Ed.) V. P. Guerrero-Bote, 102-106.
26. Arhippainen, L. & Forest, F. (2006) Future Proactive Services for Everyday Life. The I Int. Conference on Multidisciplinary Information Sciences and Technologies, InSciT2006. (Ed.) V. P. Guerrero-Bote. 122-126.
27. Forest, F. & Arhippainen, L. (2005) Social acceptance of proactive mobile services: observing and anticipating cultural aspects by a Sociology of User Experience method. In Proc. SOc-EuSAI'05. ACM Press (2005), 117- 122.

28. Arhippainen, L., Rantakokko, T. & Tähti, M. (2004) Navigation with an Adaptive Mobile Map-Application: User Experiences of Gesture- and Context-Sensitiveness. Ubiquitous Computing Systems. Springer LNCS 3598, 62-73.
29. Tähti, M., Rautio, V-M. & Arhippainen, L. (2004) Utilizing Context-Awareness in Office-Type Working Life. In Proceedings of the 3rd International Conference on Mobile and Ubiquitous Multimedia (MUM). ACM Press (2004), 79-84.
30. Tähti, M. & Arhippainen, L. (2004) A Proposal of Collecting Emotions and Experiences. In Volume 2 in Interactive Experiences in HCI 2004, 195-198.
31. Arhippainen, L., Rantakokko, T. & Tähti, M. (2004) Navigation with an Adaptive Mobile Map-Application: User Experiences of Gesture- and Context-Sensitiveness. The Second International Symposium on Ubiquitous Computing Systems (UCS) 2004.
32. Arhippainen, L. & Tähti, M. (2003) Empirical Evaluation of User Experience in two Adaptive Mobile Application Prototypes. In Proc. the 2nd Int. Conference on Mobile and Ubiquitous Multimedia (MUM). ACM (2003), 27-34.
33. Arhippainen, L. (2003) Capturing user experience for product design. IRIS26, the 26th Information Systems Research Seminar in Scandinavia. Porvoo. 9-12.8.2003.

Keynotes, Workshops and Tutorials

34. Arhippainen, L. (2013) User Experience Heuristics. Tutorial in MUM Conference, Luleå, Sweden. 3.12.2013.
35. Arhippainen, L. (2013) Creative Mixed UX methods in evaluation and design. Keynote in the World Usability Day (WUD) conference. Laboratory for Telecommunications at the Faculty of Electrical Engineering, University of Ljubljana, (LTFE). Ljubljana, Slovenia. 27th November 2013.
36. Arhippainen, L. (2013) Self-Expression Template Method for User Interface Design in a Touch Screen Device Context. Workshop in the World Usability Day (WUD) conference. Laboratory for Telecommunications at the Faculty of Electrical Engineering, University of Ljubljana, (LTFE). Ljubljana, Slovenia. 28th November 2013
37. Arhippainen, L. A Tutorial of Ten User Experience Heuristics. Tutorial in Academic MindTrek Conference, 1.10.2013. ACM Press (2013), 336-337.
38. Arhippainen, L., Pakanen, M., Hickey, S. (2013). Mixed UX Methods Can Help to Achieve Triumphs. In Proc. ACM CHI workshop on Made for Sharing: HCI Stories for Transfer, Triumph and Tragedy. Law, E. L-C., Hvannberg, E.T. Vermeeren, A.P.O.S. Cockton, G., Jokela, T. (eds). Audio Visual Services (AVS), University of Leicester, UK. 2013, 83-88.
39. Zanni, D., Alatalo, T., Goncalves, J., Ojala, T., Arhippainen, L. (2013). Porting a 3D Tablet Interface onto a Wall-Sized Display. In Proc. CHI Workshop on Interactive, Ultra-High-Resolution Displays (POWERWALL). Rooney, C., Fekete, J., Endert, A., North, C., Hornbæk, K. (eds.).
40. Arhippainen, L., Häkkinen, J., Pakanen, M., Posti, M., Ventä-Olkkonen, L. Rapid Low-Fi Prototyping Techniques for Design. FRUCT workshop 6.11.2012. <http://www.fruct.org/node/325588>
41. Pakanen, M. Arhippainen, L. and Hickey, S. (2012). UX Based Design Recommendations for Interactive 3D Objects in 3D UI on Tablet Devices. In Proc. ACM CHI Workshop on The 3rd Dimension of CHI: Touching and Designing 3D User Interfaces (3DCHI). Anderson, K., Arhippainen, L., Benko, H., de la Rivière, J-B., Häkkinen, J., Krüger, A., Keefe, D., Pakanen, M. and Steinicke, F. (eds). 91-94.
42. Rantakokko, T., Arhippainen, L., & Tähti, M. (2004) Evaluation of Sensor-Based UI Adaptation and Control in a Map-Application for Mobile Terminals, In Infotech Workshop on Processing Sensory Information for Proactive Systems (PSIPS), 14-15.6.2004. Oulu, Finland.

43. Arhippainen, L., Rantakokko, T. & Tähti, M. (2004) Mobile feedback application for emotion and user experience collection. Proactive computing workshop PROW 2004.
44. Rantakokko, T. & Arhippainen, L. (2004) Adamos Menu: Towards Adaptive Service Selection. Proactive Computing Workshop PROW 2004.
45. Tähti, M. & Arhippainen, L. (2004) Emootiot esille! Tietojenkäsittelytieteen päivät 24-26.5. Joensuu.
46. Arhippainen, L. & Tähti, M. (2003) Käyttäjäkokemuksen kartoittaminen tärkeä osa tuotesuunnittelua. Tietojenkäsittelytieteen päivät, 19-21.5. Espoo.

Poster and demo papers

47. Hickey, S., Pakanen, M., Arhippainen, L., Kuusela, E. & Karhu, A. (2012). Service Fusion: An Interactive 3D User Interface. In Proc. 11th International Conference on Mobile and Ubiquitous Multimedia (MUM), December 3-6, Ulm, Germany (demo paper). Article nro 53.
48. Hemmoranta, J., Arhippainen, L., Pakanen, M. & Hickey, S. (2012). From Sketches and User Evaluations to 3D Models. In Proc. Academic MindTrek Conference (poster paper), ACM Press (2012), 225-226.
49. Arhippainen, L., Pakanen, M. & Hickey, S. (2012). Preliminary Design Guidelines for Tablet's 3D GUIs Based on the Five UX Studies. In Proc. Designing Interactive Systems (DIS), (Poster paper), June 23-25, Newcastle, UK.
50. Arhippainen, L. The User Experience Context and Impacts of Subjective and Collective Experiences on Appraisal of ICTs. The Third International Conference on Persuasive Technology, Poster Proceedings. Oulu, 4.-6.2008, 46-49.

Conference papers (short and long, Single-blind peer review)

51. Mattila, P., Brauer, S., Arhippainen, L. & Rantakokko, A. (2013) Towards Immersive User-Friendly Future Learning Spaces in Education. In Proc. the 3rd European Immersive Education Summit. (Eds.) Gardner, M., Webb, M., Callaghan, V., Kloos, C.D. 111-122.
52. Mattila, P., Krajnak, J., Arhippainen, L. & Brauer, S. (2012) Education in 3D Virtual Learning Environment – Case Virtual-Mustiala. In Proc. the 2nd European Immersive Education Summit. (Eds.) Gardner, M., Garnier, F., Kloos, C.D. 134-145.
53. Mattila, P., Ryymin, T. & Arhippainen, L. (2011) Learn by playing with your information in a virtual 3D learning environment. In Proc. the 1st European Immersive Education Summit. (Eds.) Kloos, C.D.; Rueda, J.J.G.; Espiga, M.B.I. 98-109.
54. Arhippainen, L. Adaptive Context-Aware Mobile Services – The User's Point of View. MobileHCI'06 Doctoral Colloquium. Espoo, Finland. 12 September 2006.

Theses

55. Arhippainen, L. (2009) Studying user experience: issues and problems of mobile services – Case ADAMOS: User experience (im)possible to catch? University of Oulu. Department of Information Processing Science. Doctoral thesis. 245.
56. Arhippainen, L. (2002) Use of third-party components in software development – the integrator's point of view. University of Oulu, Master thesis. (72 + 12).

Publications and articles intended for professional communities and the general public

57. Arhippainen, L. Mukautuvan vuorovaikutuksen kokeminen. (196 – 200). Teoksessa ”Älykkäiden ympäristöjen suunnittelu, Kohti ekologista systeemiajattelua”. Kaasinen, E., & Norros, L. (Toim.). Teknologiateollisuus ry. Tampere. 2007, 320.
58. Arhippainen, L. Use and integration of third-party components in software development. VTT Electronics, Espoo. 68 p. + app. 16 p. VTT Publications : 489.
59. Arhippainen, L. 3E-menetelmä päiväkirjaan sanattoman ja sanallisen ilmaisun avaajaksi. Kirjallisuusterapialehti. 1/ 2008. (17-19).

Awards

The MUM 10 Years Impact Award 2013 was presented to Leena Arhippainen, CIE and Marika Tähti for their MUM 2003 paper ”Empirical Evaluation of User Experience in Two Adaptive Mobile Application Prototypes” at the MUM 2013 conference in Luleå, Sweden, on Dec 3rd, 2013.

Seminar and other presentations

60. Mattila, P., Arhippainen, L., Ryymin, T. (2013) Towards Innovative and User-Friendly Future Learning Spaces. (TEPE2013) Teacher Education Policy in Europe Conference, 16-18 May 2013, Helsinki, Finland.
61. Arhippainen, L. (2012) User Experiences in a Service Fusion Concept. Future Internet Seminar Series (FISS) seminar on Augmented Reality User Experiences. University of Oulu, Finland. 10th December 2012.
62. Arhippainen, L. & Pakanen, M. (2011) 3D-käyttöliittymien käyttäjäkokemus ja tutkiminen (Chiru-projekti: 3D User eXperience for Mobile Network Virtual Environments). UX SIG Oulu. 29.11.2011.
63. Arhippainen, L. (2007) Käyttäjätyyppit teknologiatuotteiden kannalta. Mitä ovat neljä käyttäjätyyppiä uusimman tutkimuksen valossa? Miten nämä ottaa huomioon järjestelmien suunnittelussa? World Usability Day: Käytettävyys kehittyy – kehittykö hyvinvointi. 8.11.2007. Oulu.
64. Forest, F. & Arhippainen, L. (2007) User Acceptance of Adaptive Mobile Services. ADAMOS Seminaari 15.6.2007. Oulu.

Teaching and lecture presentations

- Lecturer: Interaction Design course. Department of Information Processing Science, University of Oulu. 2013.
- Visiting lecturer: Example cases of utilizing mixed UX methods for design and evaluation, University of Grenoble/ LIG: EHCI team. France. 9.7.2013.
- Visiting lecturer: Paper prototyping as a part of larger concept evaluation. Visiting lecturer. Interaction Design course. Department of Information Processing Science, University of Oulu. 13.2.2012.
- Visiting lecturer: User experience (UX) of 3D user interfaces (UIs). Visiting lecturer. G2I Grenoble Institut de l'innovation. INNOVACS. Université Pierre Mendès France Grenoble. France. 6th February 2012.
- Visiting lecturer: How to evaluate user interfaces (UIs) from user experience (UX) point of view. Visiting lecturer. Interaction Design course. Department of Information Processing Science, University of Oulu. 9.1.2012.
- Visiting lecturer: IHMJ406 Ihmisen ja teknologian vuorovaikutus – mixed methods. Vierailijaluento. Jyväskylän yliopisto, Ihmistieteiden metodikeskus. 14.10.2011.

- Exercises: Käyttäjävurorvaikutuksen suunnittelu -kurssin harjoitusten vetäjä. Tietojenkäsittelytieteiden laitos, Oulun yliopisto. Syksy 2009.

Supervising

- Supervisor: S3D-käyttöliittymän evaluointi konseptisuunnittelun tukena: käyttäjäevaluoinnista suunnitteluvetureihin. (Student: Meiju Sunnari). Master thesis. 2013.
- Opponent: Stimuloitujen tuotekokemusmenetelmien vertailu vuorovaikutteisen tuotteen ulkoasun tutkimisessa. (Student: Heidi Tarkiainen). Master thesis. 2013.
- Opponent/ Supervisor: Hybrid 2D/3D User Interfaces on Tablet Devices - User Experiences and Design Guidelines. (Student: Katri Salo). Master thesis. 2011.
- Supervisor: Usability and user experience of an online service : Case PATIO (Student: Vitali Reif). Bachelor's thesis. 2011.
- Opponent: Vertaistuutorointi verkkoyhteisössä (Student: Sari Alaluusua). LuK thesis. 2010.
- Supervisor: Musiikin tuottamiseen tarkoitettujen laitteiden ja ohjelmistojen käytettävyys. (Student: Janne Rapo) LuK thesis. 2010.
- Opponent: Kognitiivinen ergonomia webitietojärjestelmien navigoinnin suunnittelussa. Tapaus Risingshadow.net. (Student: Pudas Sanna). Master thesis. 2010.
- Opponent: Käyttäjäkokemus-perustainen käytettävyyden suunnittelu ja arviointi: Tapaus NexGolf-ajanvarausjärjestelmä. (Student: Koskipaasi Terhi). Master thesis. 2010.
- Supervisor: Ajanvarausjärjestelmän käytettävyyden ja käyttäjäkokemuksen parantaminen – tapaus NexGolf (Student: Koskipaasi Terhi). LuK thesis. 2010.
- Opponent: Esteettisten elementtien vaikutus web-suunnittelussa (Student: Jukka Sirviö) LuK thesis. 2009.
- Supervisor: WWW-pohjaisen järjestelmän ulkoasun vaikutus käyttäjäkokemukseen – Tapaus Innowise CMS (Student: Kähkönen Ville). Master thesis. 2008.
- Supervisor: Uusi menetelmä ICT-käyttäjätyyppien tunnistamiseen – Case Juttutupa (Student: Vasama Jukka). Master thesis. 2008.
- Opponent: Rapid Contextual Design –metodologian soveltaminen käytännön projektissa (Student: Myllylä Mikko). Master thesis. 2008.
- Opponent: VELHOT OPPAIKSI Elektronisten aineistojen käytön ongelmien analysointi ja opastuksen kehittäminen Oulun yliopiston kirjastossa (Student: Jounio Tiina). Master thesis. 2008.
- Opponent: Uudenlaisten valikkomallien käytön tehokkuus ja wow-tehoste matkapuhelimissa. (Student: Eskelinen Elise). Master thesis. 2007.
- Supervisor: Käyttäjätutkimuksen hyödyntäminen mobiilin kontekstipohjaisen prototyypin kehittämisessä – tapaus CAPNET (Student: Koskinen Kirsi). Master thesis. 2005.