

Conference name:

37th International BCS Human-Computer Interaction Conference (BCS HCI 24)

Conference theme:

The International BCS Human-Computer Interaction Conference in 2024 was supported by the BCS Interactions Special Interest Group and hosted by the University of Central Lancashire in Preston. The BCS HCI Conference welcomed submissions on all aspects of human-computer interaction. Topics included: user experience (UX), usability testing, interaction design (IxD), human-centred AI (HCAI), education, health, sustainability, the Internet of Things (IoT), interaction technologies, and emerging interactive applications.

Introduction:

The 37th Annual British Human-Computer Interaction (HCI) Conference was held at the University of Central Lancashire (UCLan) in July 2024. The conference theme in 2024 was “Celebrating culture and community” which was inspired by the town of Preston which is famous for the ‘Preston Model’, which focusses on community wealth building within the local region, and the ‘Preston Guild’, which is a community celebration which takes place every 20 years.

The conference began on 15th July with the Doctorial Consortium delivered by Professors Raymond Bond and Janet C Read attended by twelve PhD students from across the UK. A course on Empirical Research Methods for HCI was also delivered by Scott MacKenzie (York University, Toronto) which was attended by Doctorial Consortium students along with conference delegates. The Rejoice Workshop (Joyful Identity Expression & Exploration as an Act of Resistance and a Digital Good) also ran on the 15th July, which brought academics together to discuss the integral role of joy in HCI for Queer and otherwise marginalised people.

The main conference programme ran 16-17th July. Delegates attended from England, Scotland, Ireland (Northern and Southern), Canada, Malta, Eindhoven, and Qatar. The conference began with an opening keynote talk given by Pete Lomas (Trustee, Raspberry Pi Foundation; Founder and Director of Engineering, Norcott Technologies Ltd, Fellow of the Royal Academy of Engineering) titled ‘My journey with Raspberry Pi’. Twenty-five accepted papers were presented across five paper sessions organised into topics of: Conversational and Immersive Interaction, Child-Technology Interaction, Conceptual and Methodological Frameworks, Security and Understanding User Behaviour, and Special Applications of Emerging Technology. The first day of the conference also included an industry panel and conference meal in the evening. The conference concluded on 17th July with a closing keynote from Dr Simone Stumpf (Professor of Responsible and Interactive Artificial Intelligence, University of Glasgow), titled “Responsible AI and six ways HCI can get us out of this mess”.

Conference date:

15–17 July 2024

PROGRAMME COMMITTEE

Conference Chair:

Dr Dan Fitton (Lancaster University)

Conference Co-Chair:
Dr Matt Horton (University of Central Lancashire)

Full and Short Papers Chairs:
Dr Loraine Clarke (University of St. Andrews),
Dr Mark Dunlop (University of Strathclyde),
Professor Effie Law (Durham University)

Doctoral Consortium Chairs:
Professor Raymond Bond (Ulster University),
Professor Janet Read (University of Central Lancashire)

Workshops Chairs:
Gail Collyer-Hoar (Lancaster University),
Elisa Rubegni (Lancaster University)

Interactions Gallery Chairs:
Dr Tom Flint (Edinburgh Napier University),
Neil Winterburn (FACT Liverpool),
Tanis Grandison (Edinburgh Napier University)

Industry Panel Chairs:
Jagruiti Daya (Lloyds Banking Group),
John Knight (Lloyds Banking Group)

Research and Design Competition Chair:
Mark Lochrie (University of Central Lancashire)
Web Chair:
Dr Dongjie (Jamin) Xu (University of Central Lancashire)
Local Organizing Committee Coordinator:
Megan Archer (University of Central Lancashire)
Local Student Volunteer Coordinator:
John King (University of Central Lancashire)

Full and Short Papers:
Dr Andreas Balaskas (University College Dublin)
Dr Carolina Fuentes Toro (Cardiff University)
Dr Karen Renaud (University of Strathclyde)
Dr Lynsay Shepherd (Abertay University)
Dr Maddy Steeds (University College Dublin)
Dr Maite Frutos-Pascual (Birmingham City)
Dr Monica Pereira (Brunel University)
Dr Nikki Williams (Cranfield University)
Dr Ryan Gibson (University of Strathclyde)
Dr Sangeeta Sangeeta (Keele University)
Dr Steven Sam (Brunel University)
Dr Tom Flint (Edinburgh Napier University)
Dr Wael Elzanaty (Staffordshire University)

Late Breaking Work:

Prof Helen Petrie (University of York)
Dr Fernando Loizides (Cardiff University)
Dr Mamoon Asghar (National University of Galway)
Dr Sandra Wooley (Keele University)
Dr Uchenna Ani (Keele University)
Dr Wenge Xu (Birmingham City)

STEERING COMMITTEE MEMBERS

Professor Jose Abdelnour-Nocera (University of West London)
Professor Raymond Bond (Ulster University)
Professor Alan Dix (Swansea University)
Dr Tom Flint (Edinburgh Napier University)
Professor Lynne Hall (University of Sunderland)
Professor Helen Petrie (University of York)
Professor Ed de Quincey (Keele University)
Dr Gavin Sim (University of Central Lancashire)

Conversational and Immersive Interaction Designs

Intelligent user experience tool to help evaluate and quality assure handcrafted chatbot dialogue designs

Sujisha Puthukulangara, Raymond Bond, Maurice Mulvenna, Michael F McTear (Ulster University) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.1>

Getting GPT to answer like me

Ian M O'Neill (Queen's University Belfast)
<http://dx.doi.org/10.14236/ewic/BCSHCI2024.2>

Using Semi-Formal Models to Design a Fintech Chatbot for Older Adults

Swaroop Panda (Northumbria University), Effie L-C Law (Durham University) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.3>

Exploring the Spatial Context of Householders' Interactions with a Virtual Assistant

Andrew C Pooley, Val Mitchell, Andrew May, Shichao Zhao (Loughborough University) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.9>

Combining iterative mockup prototyping with paired scales feedback

Kanar Hama Salih, Goksel Misirli, Gordon Rugg (Keele University) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.21>

Child-Technology Interaction

Comparing Fun and Performance- A User Study on Children's Gaming Experiences with Mid-Air Hand Gestures

Saba Fallah, Ian S MacKenzie (York University) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.12>

Plushonas: Exploring Neurodiverse Social Play With Children and Their Parents Through Expanded Proxy Design

Zoë Clark, Brooke Morris, Elaine Czech, Oussama Metatla (University of Bristol) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.15>

Emotional Appraisal Kit: Appraisal Components and Core Relational Themes
Sumayyah Alsubhi, Corina Sas (Lancaster University) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.14>

Towards a Framework for Designing Connected Toys
Sheral Thompson, Mark Lochrie, Dan Fitton, Janet C Read (University of Central Lancashire) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.17>

Dozzz- Exploring the Feasibility of a Voice-Based Sleep Diary for Children
Shanshan Chen, Panos Markopoulos, Jun Hu (Eindhoven University of Technology) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.10>

Conceptual and Methodological Frameworks for Interaction Design

Information Processing Biases Caused by Device Associations
Madeleine Steeds (University College Dublin), Sarah Clinch, Dr.Caroline Jay (The University Of Manchester) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.5>

Systematic Review of XAI Tools for AI-HCI Research
Ahmad Alaqsam, Corina Sas (Lancaster University) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.6>

Nudge Me and I Change- The Effect of Digital Nudging on Software Engineers' Motivation and Behaviour Towards Data Quality
Bushra M. Alkadhi, Robert Hendley, Rami Bahsoon (University of Birmingham) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.18>

Towards Design for Virtual Interconnected Curation Spaces of Heritage Artefacts, Experiences and Histories
Richard Rhodes, Sandra I Woolley (Keele University), David White (Staffordshire University) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.24>

Using Design Fiction to explore player reactions to proposed "dark design" monetization patterns for Virtual Reality games
John King (University of Central Lancashire), Dan Fitton (Lancaster University) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.25>

Security and Understanding User Behaviour

Passwords and single sign-on- Use, security, and understanding for online accounts
Gayathri Sreekumar, Helen Petrie (University of York) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.16>

Understanding Security Practitioners' Experiences of Investigating Compromised Email Accounts
Neeranjan Prakash Chitare (Northumbria University), Lynne Coventry (Abertay University), James Nicholson (Northumbria University) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.13>

Exploring Deceptive UX Patterns- Insights from Eye Tracking, EMG and Sentiment Analysis

Marzieh Jamalifard, Tony Russell-Rose (Goldsmiths, University of London), Harry Brignull (<https://testimonium.co/>) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.20>

Actively Constructed Cues for Episodic Recall

Corina Sas (Lancaster University) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.4>

Breaking Tester Stereotypes- who is testing and why it matters

Isabel Evans, Chris Porter, Mark Micallef (University of Malta) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.11>

Special Applications of Emerging Technology

Implementing a multi-sensory “Bag-of-stuff” in co-design sessions with autistic and non-autistic children

Mohamad Hassan Fadi Hijab, Shaza Khattab, Nahwan Al Aswadi, Mariam Bahameish, Marwa Qaraqe, Maria Andres, Achraf Othman (Mada center), Dena Al-Thani (Hamad Bin Khalifa University) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.7>

Mobile Learning Technologies as drivers of School Enrolment Levels in South Africa- A Policy Simulation Experiment using Machine Learning-Driven Dynamic

Autoregressive Distributed Lag Model

Fatima A Muazu, Festus F Adedoyin, Huseyin Dogan, Nicholas Mavengere, Paul Whittington (Bournemouth University) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.8>

CHERIE- User-Centred Development of an XAI System for Chest Radiology through Co-Design

Lilit Dr Hakobyan, Shereen Fouad, Manolya Kavakli-Thorne (Aston University) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.19>

Wearables, Healthcare-Computer Interaction and the Internet of Obscure Medical Things

Khalid A Khattak, Sandra I Woolley (Keele University), Tim Collins (Manchester Metropolitan University) <http://dx.doi.org/10.14236/ewic/BCSHCI2024.22>

Evaluating a Mobile Game for Urban Exploration Utilising Mobile Edge Computing (MEC)

Ioannis Doumanis (University of Central Lancashire), Konstantinos Tsitouas <http://dx.doi.org/10.14236/ewic/BCSHCI2024.23>