



The 19th International Conference on Persuasive Technology 2024

10 – 12 April 2024, Wollongong, Australia

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PERSUASIVE TECHNOLOGY 2024

WOLLONGONG, AUSTRALIA

ALBECS2024 - Wednesday 10/04/2024

UOW campus, building 6, room 101

08.30-09.00	Registration Morning Tea	<i>building 6, room 105</i>
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Morning Session (hybrid - 09.00-12.30)

09.00-10.00	Keynote 1: Designing experiments <i>via</i> bandit algorithms: modeling considerations for better outcomes (Nina Deliu)	
10.00-10.15	Break	<i>building 6, room 105</i>
10.15-12.30	Integrating Digital Calendars with Large Language Models for Stress Management Interventions <i>Pranav Rao, Sarah Yi Xu, Ananya Bhattacharjee, Yuchen Zeng, Alex Mariakakis and Joseph Jay Williams</i>	
	Expert Insights on Conversational AI Systems as an Information Intermediary for Patients and Healthcare Providers for Diabetes Lifestyle Change <i>Pei-Yu Chen, Sophie van Gent, M. Birna van Riemsdijk, Myrthe Tielman and Tjeerd Schoonderwoerd</i>	
	Explanation Patterns for The Sleep Adherence Mentor (SAM) <i>Amal Abdulrahman, Deborah Richards, Patrina Caldwell and Karen Waters</i>	
12.30-13.30	Lunch	<i>building 6, room 105</i>

Afternoon Session (in-person only - 13.30-17.00)

13.30-15.15	Advancing Ethical and Inclusive Algorithm Design: Collaborative Strategies for Bias Detection and Mitigation <i>Adeel Ahmed, Ali Husnain and Abdul Wahid Toor</i>	
	Algorithmic Support for Health Behavior Change: A Scoping Review <i>Diederik Heijbroek, Nele Albers and Willem-Paul Brinkman</i>	
15.15-15.30	Afternoon tea	<i>building 6, room 105</i>
15.30-16.30	Keynote 2: Human-empowered computer-mediated behavior change (Deborah Richards)	
16.30-17.00	Workshop Reflection & closing remarks	

17.15-18.15	Conference welcome reception	<i>building 11, room Thought Bubble</i>
19.00	Optional dinner with workshop participants at restaurant TBD.	

*** nominees for Best Paper Award



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PERSUASIVE TECHNOLOGY 2024

WOLLONGONG, AUSTRALIA

DDEP2024 - Wednesday 10/04/2024

UOW campus, building 6, room 209

09.00-09.30	Registration		
09.30-09.40	Morning Tea		<i>building 6, room 105</i>
09.30-09.40	Workshop Opening Remarks		
09.40-10.10	Invited Talk 1	Prof. Yuichi Washida Hitotsubasi U(Japan)	Data & Design Education in Management Studies
10.10-10.40	Invited Talk 2	Prof. Minyuan Ma National Cheng Kung U (Taiwan)	From Design to Design Thinking: Enhancing Soft Skills in Education
10.40-11.00	Break		<i>building 6, room 105</i>
11.00-12.00	Regular Presentations	Dr. Nanami Furue Hitotsubashi U (Japan)	The Relationship Between Individual Traits and CPE for Universal Creativity Education Program Design
		Dr. Wenzhen Xu Hitotsubashi U (Japan)	Adapting to Audiences: Strategic Alignment of Television Commercials with Viewer Attitudes in a Data-Driven Era
		Mr. Chinenye Ndulue Dalhousie U(Canada) PPT2024	Investigating Gender-Specific Preferences for Persuasive Strategies in a Persuasive Game for Healthy Eating
		Mr. Victor Okpanachi U of Arizona(USA) PPT2024	Network Science Analysis of Reviews of Persuasive Game Elements (Online)
12.00-13.00	Lunch		<i>building 6, room 105</i>
13.00-15.00	Hands-on Session	Dr. Tseng-Ping Chiu National Cheng Kung U (Taiwan)	A Quick Start to Apply Design Thinking in Human-Computer Interactive System Development
15.00-15.20	Break		<i>building 6, room 105</i>
15.20-15.50	Invited Talk 3	Dr. Michael Björn Ericsson (Sweden)	4,320 Hours in the Metaverse: How the Metaverse Shapes Our View of Reality
15.50-16.00	Workshop Closing Remarks		
16.00-16.30	Networking		
17.15-18.15	Conference welcome reception		<i>building 11, room Thought Bubble</i>

*** nominees for Best Paper Award



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PERSUASIVE TECHNOLOGY 2024

WOLLONGONG, AUSTRALIA

BCSS2024 - Wednesday 10/04/2024

UOW campus, building 6, room 105

Session 1 (13.30-15.00), Chair: Sriram Iyengar

12.30-13.30	Lunch	<i>building 6, room 105</i>
13.30-13.35	Session Opening Remarks	
13.35-13.55	Surfers' Perceptions of Safe-Surfing Mobile Application Elena Vlahu-Gjorgievska, Yahya Saad Y Alhatem, Noel Silvernius Galasau, Umaima Zahra Halim, Norah Makhdoor O Almehmadi and Khin Than Win	
13.55-14.15	Health-related behavior changes using IoHT for pregnant and postpartum women: From the Be-TWINKLE study Lian Cao, Masato Taya, Yuko Sakamoto, Yuka Honda, Sayuri Hukuda, Yuichi Sato and Jin Nakazawa	
14.15-14.35	If You Reply to Me, I Will Buy from You: A Social Influence Examination of Reciprocity on Twitter Rosanna Guadagno, Amanda Sardos and Amanda Kimbrough	
14.35-14.55	Persuasive System Design Principles for Pandemic: A Workshop-Based Inquiry into Comprehensibility for Designers He Li and Federico Tajariol	
14.55-15.00	Closing of Session	
15.00-15.30	Afternoon tea	<i>building 6, room 105</i>

Session 2 (15.30-17.00), Chair: Elena Vlahu-Gjorgievska

15.30-15.35	Session Opening Remarks	
15.35-15.55	Cost to Develop Persuasion in Health Behavior Change Support Systems: A Weight Management App Scenario Sharon Nabwire and Harri Oinas-Kukkonen	
15.55-16.15	Understanding the Effects of Watching a Nature Video on Informal Caregivers' Emotional Well-Being Compared to Non-Caregivers' Emotional Well-being Beatriz Peres and Pedro Campos	
16.15-16.35	Designing for Diversity: Dynamic Persuasive Strategies in mHealth App Development Aleise McGowan, Scott Sittig, David Bourrie, Ryan Benton, Sriram Iyengar and Aysu Dalogullari	
16.35-16.50	General Discussion	
16.50-16.55	BCSS Workshop Best paper award announcement	
16.55-17.00	Closing of session	
17.15-18.15	Conference welcome reception	<i>building 11, room Thought Bubble</i>

*** nominees for Best Paper Award



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PERSUASIVE TECHNOLOGY 2024

WOLLONGONG, AUSTRALIA

Main Conference - Thursday 11/04/2024

UOW campus, building 11, room Thought Bubble

08.30-09.30	Registration Morning Tea
09.30-10.00	<i>Chair: Khin Than Win</i> Opening address: Senior Professor Michael Lerch
10.00-11.00	<i>Chair: Nilufar Baghaei</i> Keynote address: Professor Shlomo Berkovsky “Personalised persuasion: the road travelled and future directions”

Session 1 (11.00-12.30)

Chair: Nilufar Baghaei

11.00-11.20	*** p.35	Exploring the influence of persuasive strategies on student motivation: self-determination theory perspective (<i>Fidelia Orji, Francisco J. Gutierrez and Julita Vassileva</i>)
11.20-11.40	p.16	Exploring the Influence of Game Framing and Gamer Types on the Effectiveness of Persuasive Games (<i>Chinenye Ndulue and Rita Orji</i>)
11.40-12.00	p.8	Estimating Sense of Agency from Behavioral Logs of Smartphones and Wearable Devices: Toward a Just-in-Time Adaptive Intervention System (<i>Ryunosuke Togawa, Roberto Legaspi, Yasutaka Nishimura, Akihiro Miyamoto, Bo Yang, Eriko Sugisaki, Kazushi Ikeda, Nao Kobayashi and Yasushi Naruse</i>)
12.00-12.15	p.27	Experiential Learning or direct training: Fostering ethical cybersecurity decision-making via serious games (<i>Bakhtiar Sadeghi, Deborah Richards, Paul Formosa and Michael Hitchens</i>)
12.15-12.30	p.13	Persuasive Technology through Behavior and Emotion with Pet-type Artifacts (<i>Rio Harada and Kaoru Sumi</i>)

12.30-13.30	p.67	<u>Industry & Poster Presentations</u> Immersive Storytelling: Exploring the Potential of Virtual Reality to Develop Empathetic Awareness Among Students (<i>Rhodora Abadia</i>)
	p.69	Development of a Prototype AI System for Real-time Emotion Prediction and Mental State Adjustment (<i>Akihiro Sasaki, Eriko Sugisaki, Roberto Legaspi, Yasushi Naruse and Nao Kobayashi</i>)
	p.71	Color Psychology-Based Persuasive Interaction Design for Health Behavior Change (<i>Yugo Nakamura and Yutaka Arakawa</i>)
	p.65	A serious game for promoting sustainable food choices (<i>Peter Ruijten, Jaap Ham and Nienke de Jongh</i>)
12.30-13.30	Lunch	

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PERSUASIVE TECHNOLOGY 2024

WOLLONGONG, AUSTRALIA

Session 2 (13.30-15.00)

Chair: Raian Ali

13.30-13.50	*** p.45	Persuasive System Design Features for Mobile Mental Health Applications (Yonas Deressa Guracho, Susan J. Thomas, Nawaf Almutairi and Khin Than Win)
13.50-14.10	p.54	Design and Development of mHealth App: Eye Donor Aust (Waraporn Chumkasian, Khin Than Win, Elena Vlahu-Gjorgievska, Mark Freeman, Ritin Fernandez, Heidi Green and Con Petsoglou)
14.10-14.30	p.31	Exploring Self-competition as a Viable Motivation to Promote Healthy Behavior (Henna Hyypiö, Sarthak Giri and Harri Oinas-Kukkonen)
14.30-14.45	p.30	Evaluating the Persuasive Potential from Software Design Specification (Eunice Eno Yaa Frimponmaa Agyei, Markku Kekkonen and Harri Oinas-Kukkonen)
14.45-15.00	p.20	DROP DASH: A Persuasive Mobile Game to Promote Healthy Hydration Choices Using Machine Learning (Sussan Anukem, Chinenye Ndulue and Rita Orji)
15.00-15.30	Afternoon tea	

Session 3 (15.30-17.10)

Chair: Mark Freeman

15.30-15.50	*** p.12	An Embodied Conversational Agent to Support Wellbeing After Injury: Insights from a Stakeholder Inclusive Design Approach (Katherine Hopman and Deborah Richards)
15.50-16.10	*** p.26	Counterfactual Reasoning Using Predicted Latent Personality Dimensions for Optimizing Persuasion Outcome (Donghuo Zeng, Roberto Legaspi, Yuewen Sun, Xinchuai Dong, Kazushi Ikeda, Peter Spirtes and Kun Zhang)
16.10-16.30	p.28	Exploring the Effect of Using a Single Versus Multiple Behaviour Change Strategies on Motivation to Use Gratitude App and Possible Gender Differences (Felwah Alqahtani, Chinenye Ndulue and Rita Orji)
16.30-16.50	p.21	Negotiating Creativity amidst Interactive Marketing: Understanding Persuasion Tactics of Virtual Influencer Marketing from a Developer's Perspective (Bhakti Mehta, Manisha Pathak Shelat and Arpan Yagnik)
16.50-17.10	p.24	A Systematic Review of Persuasive Technology in Defence and National Security: Extended Abstract (Steven Davis, Mirela Stjelja and Dragana Calic)

18.30-21.30	Conference dinner @ Harbourfront Seafood Restaurant	
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PERSUASIVE TECHNOLOGY 2024

WOLLONGONG, AUSTRALIA

Main Conference - Friday 12/04/2024

UOW campus, building 11, room Thought Bubble

08.30-09.00	Registration Morning Tea
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Session 4 (09.00-10.30)

Chair: Kiemute Oyibo

09.00-09.20	*** p.36	The Effect of Dark Patterns and User Knowledge on User Experience and Decision-Making (Tasneem Naheyan and Kiemute Oyibo)
09.20-09.40	*** p.22	SmileApp: The design and evaluation of an mHealth app for Stress Reduction through Artificial Intelligence and Persuasive Technology (Joseph Orji, Gerry Chan, Chinenye Ndulue and Rita Orji)
09.40-10.00	p.18	Harnessing Large Language Models for Automatic Evaluation of Mobile Health Applications based on Persuasive System Design Principles and Mobile Application Rating Scale (Yasin Afşin and Tuğba Taşkaya Temizel)
10.00-10.15	p.52	Persuasive design principles for a medication adherence app for chronic arthritis conditions (Saleh Altuwayrib, Mark Freeman, Nawaf Almutairi and Khin Than Win)
10.15-10.30	p.11	How the role of a persuasive robot impacts one's attitude towards it (Peter Ruijten, Jin Smeding and Jaap Ham)

	Chair: Raian Ali	
10.30-11.30	Keynote address: Associate Professor Terry Fleming "Opportunities and Challenges in Persuasive Technology for Mental Health"	

11.30-13.00	p.67	<u>Industry & Poster Presentations</u> Immersive Storytelling: Exploring the Potential of Virtual Reality to Develop Empathetic Awareness Among Students (Rhodora Abadia)
	p.69	Development of a Prototype AI System for Real-time Emotion Prediction and Mental State Adjustment (Akihiro Sasaki, Eriko Sugisaki, Roberto Legaspi, Yasushi Naruse and Nao Kobayashi)
	p.71	Color Psychology-Based Persuasive Interaction Design for Health Behavior Change (Yugo Nakamura and Yutaka Arakawa)
	p.65	A serious game for promoting sustainable food choices (Peter Ruijten, Jaap Ham and Nienke de Jongh)
12.00-13.00	Lunch	

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Session 5 (13.00-14.40)

Chair: Jaap Ham

13.00-13.20	p.37	How would I be perceived if I challenge individuals sharing misinformation? Exploring misperceptions in the UK and Arab samples and the potential for the social norms approach (<i>Selin Gurgun, Muaadh Noman, Emily Arden-Close, Keith Phalp and Raian Ali</i>)
13.20-13.40	p.7	Collaboratively Setting Daily Step Goals with a Virtual Coach: Using Reinforcement Learning to Personalize Initial Proposals (<i>Martin Dierikx, Nele Albers, Bouke L. Scheltinga and Willem-Paul Brinkman</i>)
13.40-14.00	p.25	Exploring Persuasive Tools to Enhance Digital Resilience to Misinformation – Extended Abstract (<i>Lana Edwards, Mirela Stjelja, Dragana Calic and Steven Davis</i>)
14.00-14.20	p.55	Persuasive AR Technology for Information Producers (<i>Yonit Rusho, Ganit Richter and Daphne Raban</i>)
14.20-14.40	p.63	When certain persuasive techniques fail to prompt users to challenge misinformation: Lessons learnt (<i>Selin Gurgun, Emily Arden-Close, Keith Phalp and Raian Ali</i>)
14.40-15.10	Afternoon tea	

Session 6 (15.10-16.40)

Chair: Elena Vlahu-Gjorgievska

15.10-15.25	p.19	Predicting Ethical Orientation based on Personality for Tailored Cyberethics Training (<i>Muhammad Hassan Ali Bajwa, Deborah Richards and Paul Formosa</i>)
15.25-15.40	p.4	Persuasive Systems Features in Digital Health Interventions for Diabetes Management: A Scoping Review (<i>Renata de Oliveira and Harri Oinas-Kukkonen</i>)
15.40-16.00	p.23	A novel mobile app prototype for personalised guidance on food choices leveraging persuasive technology (<i>Vivienne Guan and Khin Than Win</i>)
16.00-16.20	p.51	Co-Designing Persuasive Virtual Reality Supermarkets for Practicing Activities of Daily Living (<i>Ethan McDonnell, Riley Mosca, Clare Burns, Trevor Russell and Nilufar Baghaei</i>)
16.20-16.40	p.62	Comparing the Impact of Social Proof and Freedom of Choice on Attitudes toward AI (<i>Sameha Alshakhsi, Areej Babiker, Dena Al-Thani, Christian Montag and Raian Ali</i>)

16.45-17.30	Closing ceremony	
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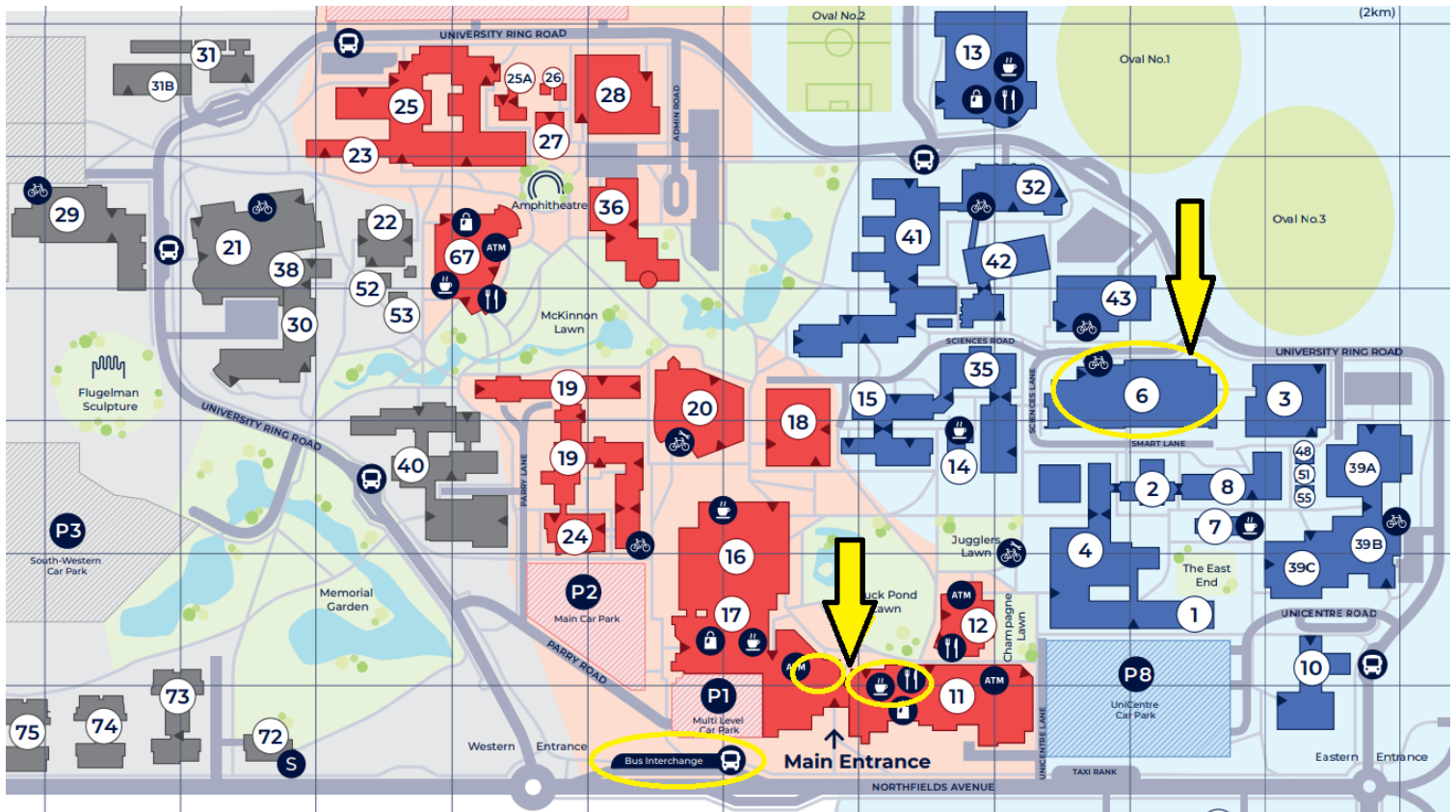
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PERSUASIVE TECHNOLOGY 2024

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UOW Campus map



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