Conference Programme

4th Design, Development& Research Conference: Student Symposium
8 September, Cape Town, South Africa

design-development-research.co.za

District Six Museum Homecoming Centre

Tuesday 9 September 2014

7:30-8:30	Welcome desk Registration		
8:30-9:30	**Opening: Prof Johannes Cronje**, Dean of the Faculty Informatics & Design, CPUT **Keynote: Prof Ezio Manzini,** Development as cosmopolitan localism. Design research for resilient and learning systems.		
9:30-11:00	**Session 1A** Room: Downstairs Chair: Dr E Pineteh	9:30-11:00	**Session 1B** Room: Upstairs Chair: Dr A de la Harpe
Art and design education	The role of design courses in engineering programmes: The case of the University of Botswana. *S.J. Motshubi, R. Moalosi (R)* Cognitive arousal as inspiration for design thinking: sustaining eco-awareness and an adoption of a deep approach to learning through found objects. *P. George, M.K. M'Rithaa, G. D. Hattingh (R)* Visual art and Design in B Ed Art Education. *G. Westraadt* (PK) Autobiographical learning: a digital perspective. *C. Livingston (PK)* Promoting independent learning through the design of a scaffolded reading strategy progamme. *S Cox (PK)*	Design to empower	Into the grey: towards successful implementation and effective evaluation of "Design for Development" projects. *B. Baldassarre, N. Miccichè (R)* Youth empowering the youth through participatory service design. *T. Ongwere, H. Iipito, S. Chivuno-Kuria, H. Winschiers-Theophilus (R)* Towards the comparison of the functional creativity expectations of various sectors in the IT industry with the functional creativity of final year projects of Information Systems students. *A. Kruger, M. Matthee, M. Turpin(R)* An Empirical Analysis for the Mobile Learning Information Systems User Evaluation. *A. Bere (R)*

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11:00-11:30	Tea break & Networking		
11:30-13:00	**Session 2A** Room: Downstairs Chair: Dr E Pepler		**Session 2B** Room: Upstairs Chair:
Art and design education	Constructing' a bridge between less and more. *G. Westraadt (R)* Engaging in Art Appreciation: a dialogue autobiographical perspective. *C. Livingston (R)* Instructional strategies for effective teaching and learning of creative arts: the dilemma of generalist teachers in Ghana. *N.A. Opoku-Asare (R)* Phone to Photoshop: Mobile workarounds in young people's visual self-presentation strategies. *T. Noakes, M. Walton, A. Venter, J.C. Cronje (R)*	Nanosatellite applications towards sustainable social development	Invited Speaker: Prof Norman Fitz-Coy, SARChI Research Chair at CPUT (R) Electrical power subsystem design proposed for the ZACUBE-2 3U CubeSat. nanosatellite mission. *M. Maleka, S.W.J. Cupido, D.F. Visser (R)* An evaluation of low noise amplifier performance at L-band for Cubesat applications. *E.W. Louw, C.V. Whaits (R)* Making nano-satellites more sustainable: Investigation into an optimal communications protocol using a novel simulation tool. *J. le Roux, A. Barnard, R. Wolhuter (R)*
13:00-14:00	**Lunch break**		

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14:00-14:20	**Keynote:** Aslam Levy, Social Media, Design and Smart development in the Public service.		
14:20-15:30	**Session 3A** Room: Downstairs Chair: Dr C Livingstone		**Session 3B** Room: Upstairs Chair:
Design to empower	Understanding group work in Higher Education: Establishing a culture of deliberation amongst design students. V. *du Preez, V. Barnes, R. Futerman (R)* Development of products for persons with disabilities in Kenya. *L. Osanjo(R)* Internet of Hope: Perceptions of Internet in marginalized communities of the Cape of Good Hope. *S.Pather, L. Bagui (S)* The impact of the Pearson MyFoundationslab computer programme on English reading and writing competence of 1st year Education students. *H. Dippenaar, M. Matthews (PK)*	Nanosatellite applications towards sustainable social-economic development	Invited Speaker: Prof Mellet Moll, Department of Mechanical Engineering (R) Results from the QB50 precursor launch campaign. *J. Erasmus (R)* The design of a camera system for an Earth observation CubeSat mission. *C.R. Jooste, J.R. Quibell, D.F. Visser (R)* Nano-satellite in-situ monitoring: An adaptable approach to communication schemes through SDR-based technology. *D.J. Villiers, D.F. Visser*
15:30-16:00	**Tea break & Networking**		

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16:00-17:00	**Session 4A:** Room: Downstairs Chair: Ms J. Kloppers	16:00-17:00	**Session 4B:** Room: Upstairs Chair:
Workshop	**Advanced Learning Design for Rhizonomic Learning** This workshop considers the emerging field of "Learning Design" (As opposed to "Instructional Design") as an approach to solving problems related to designing an optimal blend. Delegates will be expected to do some background learning as homework in preparation for this session, and during the session will be expected to participate using mobile learning devices.	Nanosatellite applications towards sustainable social-economic development	Invited Speaker: Dr Ben Opperman, South African National Space Agency The performance evaluation of distributed inter-satellite communication protocols for cube satellite systems. *R. Radhakrishnan, Q. Zeng, W. Edmonson*
18:30-21:00	**Conference Function** **Host: Prof A Staak** Deputy Vice-Chancellor: Teaching and Learning at the Cape Peninsula University of Technology **Guest of Honour:** Solly Ariefdien		

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Wednesday 10 September 2014

7:30-8:30	**Welcome desk** **Registration**		
8:30-9:30	**Day two Opening:** **Keynote:** Kirsten Wilkins, Tactical Urbanism.		
9:30-11:00	**Session 5A** Room: Downstairs Chair: Dr A de la Harpe	9:30-11:00	**Session 5B** Room: Upstairs Chair: Dr E Ruhode
Design for social innovation, empowerment and sustainability	Application of Design Thinking In the Development of an Information System through a Scrum Methodology. *M.P. Makutsoane, R. Naidoo (R)* Design for social innovation in favela in Rio de Janerio: from Occupy Wall Street to "Occupy Alem‹o". *C. Cipolla, R. Bartholo, R.C.M. Afonso (R)* Context sensitivity and process improvement as influencers to EMR adoption by clinicians: Implementer perspectives. *G Khan, L Hanmer, M Korpela (R)* Towards a Comfortable, Energy-Efficient Office using a Publish-Subscribe Pattern in an Internet of Things Environment. *L. Butgereit, A. Smith, T. Thomson (R)*	*Education and training*	A rhizoanalysis of learning connections among higher education learners. *S. Kafui Aheto, J.C. Cronje (R)* Multimedia learning and nursing informatics education in South Africa. *R.D. Debrah, R. de la Harpe, S. Bhebe, D.M.K. Mugendi (R)* Merging principles of Design Thinking and Media Literacy on route to an innovative approach to the pedagogy of critical thinking. *E. Pepler (R)* Sustaining cultural heritage through traditional game design. *O. Marope, R. Moalosi (R)*
11:00-11:30	Tea break & Networking		

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11:30-13:00	**Session 6A** Room: Downstairs Chair: Prof R de la Harpe		**Session 6B** Room:Upstairs Chair: Dr E Ruhode
Design for social innovation, empowerment and ...	Staff turnover within the micro retail sector. *S.C.Warden, X.Han, A.Nzawou (R)* Empowering and rewarding innovation in the manufacturing industry: Managers' perspectives. *M. Jakovljevic, I. Rada• Á, M.J. Bushney, D. Îie• in-• Êain (R)* Finding errors causation in design by studying obsolete engineering drawings. *Z. Tjiparuro (R)* A Framework for the Development of Participatory Assessment in Project-Based Learning (PAPBLE). *E. F. Eshun (R)*	*E-government for development*	Technology affordances and diffusion for Mobile Connectivity and Applications in Zimbabwe. *G. Kabanda* (R) E-skills for successful m-government in the Western Cape. *Z. Mitrovic, K. Thompson, V. Klaas, F. Mbhele (R)* Information Sharing Impediments In Government Departments. *S. Hamunyela (R)* Readiness Assessment of Cloud-Computing Adoption within a Provincial Government of South Africa (Pieter van Brakel Memorial Paper). *L. Xi, Z. Mitrovic (R)*
13:00-14:00	**Lunch break** **Cape Speed- Formula Student** Interactive presentation 13:20-14:00		

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14:00-15:30	**Session 7A** Room:Downstairs Chair: Ms G Khan		**Session 7B** Room:Upstairs Chair: Dr R de la Harpe
Design for social innovation, empowerment and sustainability	Improving the utilisation of smart technology in South African homes (Pieter van Brakel Memorial Paper). *L. Cilliers, S. Gaba (R)* Personal Health Records: Design considerations for the South African context (Pieter van Brakel Memorial Paper). *A. Mxoli, N. Mostert-Phipps (R)* Is UCD approach applied by industry within Botswana? Case Studies on application of participatory approach to NPD. *M.G. Ollyn, R.J. Bibb, G.E. Torrens (R)* A symbiotic relationship between form and function (user value). *S. Patrick, M. M'Rithaa (R)*	Design experiences	Design led PSS adoption as a competitive approach in non-design led SMEs in Botswana. *Y. Rapitsenyane, T. Bhamra, R. Trimingham (R)* Participatory Design without borders. *Chisin, R. Debrah, M. M'Rithaa, J. Van Niekerk (P)* Design approach towards health education and promotion. *R. Debrah, S. Bhebe, R. de la Harpe (P)* The design, development and research of a Makerspace. *R.M. Branch (P)* The effective implementation of renewable energy policies in Turkey. *N.K. Ata (P)* Scanning the State of Engineering Design Practice in Africa and aligning it to the state of the art in the field. *H. Michael, M. Muchie (R)*
15:30-16:00	**Conference Closing** **Tea break & Networking**		