IEEE GHTC 2013 - Accepted Papers for Oral Presentation

Paper ID	Paper Title	Author Names	Track
3	An EPICS-in-IEEE initiative: learners of St Alban's College and students of the University of Pretoria seek earth observation solutions through air-quality microsensing	Saurabh Sinha, Chris Mouton, Phumudzo Bebwele	Education
8	An electronic solution to automate the process of Grade-1 Braille training	Piotr Osuch, Saurabh Sinha	Education
9	User Interface Design of a Digital Sphygmomanometer for Rural India	Prabir Mukhopadhyay, IIITDM Jaba	Health
10	Engaging Diverse Learners through New Technologies	Carol Shepherd, Nadelon Alpert	Education
11	On-Board Solar Power for Small-Scale Distant-water Fishing Vessels	Satish Babu, Vincent Jain	Energy
13	A Crowd-sourced Approach for Wild Elephant Tracking	Satish Babu, Tarsh Thekaekara	Connectivity & Communication
14	The Praxis of Systems Thinking for Concurrent Design Space and Business Strategy Exploration	Rachel Dzombak, Chanakya Mehta, Khanjan Mehta, Sven Bilen	Humanitarian Application
15	Gutter Design and Selection for Roof Rainwater Catchment Systems	Jillian Zankowski, Yixin Sun, Chiyan Poon, Emily Passauer, Abdalla Nassar, Khanjan Mehta	Water & Agriculture
16	Beneficial Microbes "Jeevatu" for Biodegradable Waste Management and Plant Disease Control	Bharat Poudyal	Water & Agriculture
21	Technologies, Indigenous Cultural Heritage and Community Capacity Building	Carolyn Woodley, Stewart Taylor, Sean Fagan, Sue Marsshall	Humanitarian Challenge & Opportunity
22	Key Challenges of Product Development for Humanitarian Markets	Ana Laura Santos, Brita Nielsen	Humanitarian Challenge & Opportunity
24	Research and Development in Humanitarian Engineering	Gary Conkol	Humanitarian Challenge & Opportunity
25	Simple Algorithm for Chlorine Concentration Control	David Peter	Water & Agriculture
26	Non-invasive Microwave Breast Cancer Detection - A Comparison Study	Arezoo Modiri, Kamran Kiasaleh	Health
27	Experimental Results for a Novel Microwave Radiator Structure Targeting Non-invasive Breast Cancer Detection	Arezoo Modiri, Kamran Kiasaleh	Health
33	Determine Additional Locations of Tsunami Escape Building in Meuraxa Banda Aceh, Indonesia	Hendri Yuzal	Disaster
34	Effect of contaminated filtration sand on performance of household biosand filters	Shannon Bartelt-Hunt, Caleb White, Jodi Sangster, Stacey Joy, Matt Pirog, Elizabeth Jones	Water & Agriculture
35	Sustainable Community Development- Westwood Solar Furnace Project	Aaron Brown, Elisa Teipel, Kaitlin Litchfield, Leigh Gilmore	Humanitarian Challenge & Opportunity
39	Low Cost Solar Thermal Energy Generation for Developing Economies	Darick LaSelle, Robert Liechty, Nathan Clark, Hassan Alzamzam, Jasmin Dzabic, Robert Foster	Energy
42	A small-hydro plant model for feasibility analysis of electrification projects in rural Tanzania	Stefano Mandelli, Emanuela Colombo, Bonaventure Saanane, Andrea Redondi, Francesco Bernardi, Prosper Mgaya, Johnstone Malisa	Energy

IEEE GHTC 2013 - Accepted Papers for Oral Presentation

Paper ID	Paper Title	Author Names	Track
43	Simple Messaging and Collaboration System for Disaster Environments	Ramsey Meyer	Connectivity & Communication
46	Biogas – An Alternative Household Cooking Technique for Zambia	Likonge Makai, Marta Molinas	Energy
48	Senior Design Project for Humanitarian Purpose: Sign Language Device for Children with Hearing Disability	Mouna Nakkar	Health
49	Digitization of Health Records in Rural Villages	Rajan Vaish, Sascha Ishikawa, Jing Liu, Stephanie Berkey, Philip Strong, James Davis	Health
50	Field-Portable Lensfree Holographic Color Microscope for Telemedicine Applications	Alon Greenbaum, Najva Akbari, Alborz Feizi, Aydogan Ozcan	Health
51	A Survey on Wireless Mesh Network Applications in Rural Areas and Emerging Countries	Christian Köbel	Connectivity & Communication
53	Cognitive-Cultural Simulation of Local and Host Government Perceptions In International Emergencies	Daniel Olsher	Disaster
55	Powering & Watering Agriculture: Application of Energy-Water Nexus Planning	Amro Farid, William Lubega	Water & Agriculture
56	Design of a Hybrid Renewable Energy System for a Northern Ontario Community	Marielle Magtibay, Diana Wong	Energy
57	A Modular Simulation Platform for testing Hybrid DC/AC Future Grid Solutions for Remote Areas	Eleder Araneta, Marta Molinas, Elisabetta Tedeschi	Energy
58	Functional Water Sources That Don't Work: A case for household self supply through the Mzuzu Smart Centre, Malawi	Rochelle Holm, Elijah Wanda, James McGill	Water & Agriculture
59	Experimental Analysis of Effects of Installation Alignment and Solar Insolation on Power Generation by Solar Panels	Moein Jazayeri, Sener Uysal, Kian Jazayeri	Energy
62	Developing Engineering Programmes specialising in renewable energy for Environmental Sustainability	Alan Rocha	Education
64	Creating Opportunities for Young Humanitarian Entrepreneurs to Use Technology to Change the World and Reduce Poverty in Developing Communities	Gim Soon Wan, Darrel Chong	Humanitarian Challenge & Opportunity
65	On the Performance of GRASP and Dynamic Programming for the Blood Assignment Problem	Kevin Igwe, Micheal Olusanya, Aderemi Adewumi	Health
66	Crowd-sourcing urban air-quality in developing countries through open source technologies	Justin Henriques, Brian Bojarski, Kyle Byrd, Melissa Von Wald	Humanitarian Application
70	Remote Monitoring of Off-Grid Renewable Energy: Case Studies in rural Malawi, Zambia, and Gambia	Peter Dauenhauer, Damien Frame, Scott Strachan, Michael Dolan, Million Mafuta, Daniel Chakraverty, Jeff Henrikson	Connectivity & Communication
72	An Integrated Approach to Energy for Development - Case Study of the Malawi Renewable Energy Acceleration Programme	Damien Frame, Peter Dauenhauer, Kelvin Tembo, Catherine Currie, Graham Ault	Energy
74	Augmented WAstage REmover	Saronroy Albert, Duraiarasan A	Health
79	Low Cost Lumen Testing Procedure In Bangladesh Perspective	Akm Azad, Sabbir Khan, Rafiur Rahman, Farah Shabnam	Energy

IEEE GHTC 2013 - Accepted Papers for Oral Presentation

Paper ID	Paper Title	Author Names	Track
80	Big Data and Humanitarian Supply Networks - Can Big Data give Voice to the Voiceless?	Asmat Monaghan, Mark Lycett	Humanitarian Challenge & Opportunity
81	The IEEE Actionable Data Book: A Platform For Inclusive Education	Edilson Arenas, Tyde Richards, Avron Barr	Education
82	Challenges and Successes in Making Health Care More Accessible To Rural Communities In Waslala, Nicaragua Using Low-Cost Telecommunications	Pritpal Singh, Ruth McDermott-Levy, Elizabeth Keech, James Klingler, Maria Moncada	Health
83	Prevention of Power Blackout and Power Theft using IED	Amarnath R, Kalaivani N, Priyanka V	Energy
87	Unified Green Village Electricity Project Concept; a Suitable Model for Reliable Renewable Energy Deployment in Nigeria	Ifeanyi Orajaka	Energy
88	Rehabilitating Former Landfill Sites: A Case Study in Habitat Restoration	Peter Ash, Anju Bist, Dan Sullivan, Smitha Chandran, Nikhil Kothurkar	Humanitarian Application
92	Solar Park in Gaza City: A Proposed Social Business to bring Renewable Energy Knowledge in the Conflict Region	Yaser Qudaih	Energy
93	COSMGrid: Configurable, Off-the-shelf Micro Grid	Jonathan Fürst, Nik Gawinowski, Sebastian Büttrich, Philippe Bonnet	Energy
94	System of People Search under Avalanches in Mines	Igor Shirokov	Disaster
95	Cognitive/AI Peacekeeping Decision Support Models	Daniel Olsher	Disaster
96	Affordable Dermascope for Resource-Poor Settings	Jenna Johnstone, Brian Bacik, Shannon Burke, Rachel Dzombak, Khanjan Mehta, Peter Butler	Health
98	The Feasibility of Rice Bags as a Low-Cost and Locally-Available Alternative to Greenhouse Glazing	Shayne Bement, Abdalla Nassar, Khanjan Mehta	Water & Agriculture
99	Family Information Sharing System based on a Judgement of Emergency	Yuka Hasegawa, Masato Oguchi	Disaster
100	Modeling Social Media Network For Effective Healthcare In Emerging Economies' Semi-Urban/Urban Context	Amrita Amrita, Sreekanth Vettikkadu, Dhrubes Biswas	Health
101	A sustainable approach to municipal solid waste management in Southern Nigeria	Ye-Obong Udoakah, Uduak Akpan	Health
102	Radio Signal-based Measurements for Localized Heavy Rain Detection using Smartphones	Jane Louie Zamora, Shigeru Kashihara, Suguru Yamaguchi	Disaster
103	Chataka: An Open Data Initiative for the Water Sector	Santosh K, Subrat Rout	Water & Agriculture
106	Modelling Malnutrition Toddlers In East Java Province Using Geographically Weighted Regression Approach	Rahandini Lestari, Sutikno Sutikno	Health
107	PulaCloud: Human Computation for Economic Development	Andrew Schriner, Daniel Oerther	Humanitarian Challenge & Opportunity
108	Remote Health Monitoring through an Integration of Wireless Sensor Networks, Mobile Phones & Cloud Computing Technologies	Sajjad Hussain Shah, Assad Iqbal	Connectivity & Communication

IEEE GHTC 2013 - Accepted Papers for Oral Presentation

Paper ID	Paper Title	Author Names	Track
109	Enhancing Student Engagement in the Online Classroom	Enid Acosta-Tello	Education
110	Synthetic Aperture Radars for Humanitarian Purposes: Products and Opportunities	Guiseppe Ruello, Donato Amitrano, Gerardo Di Martino, Antonio Iodice, Daniele Riccio, Maria Nicolina Papa, Fabio Ciervo, Youssouf Koussoube	Humanitarian Application
114	LARN: Indoor Navigaion for Elderly and Physically Challenged	Rajesh Megalingam, Ananthakrishnan Ponnileth Rajendran, Deepak Dileepkumar, Abhiram Soloman	Health
117	GreenEduComp: Low Cost Green Computing System for Education in Rural India A Scheme for Sustainable Development Through Education	Mukundhan Srinivasan, Anand B, Vineeth Vijayaraghavan, Venus Antony A. J.	Education
118	Utilizing Microsolar Charging Systems to Combat the Electricity-Poverty Nexus	Naman Trivedi, Thomas Larson	Energy
120	A General Perspective on Software-Hardware Defined Cognitive Radio Based on Emergency Ad-Hoc Network Topology	Ahmed Abdul Salam	Connectivity & Communication
121	Mobile Sensing for Agriculture Activities Detection	Somya Sharma, Jabal Raval, Bhushan Jagyasi	Water & Agriculture
122	The Case for Interdisciplinarity: Lessons from the Field	Revi Sterling, John Bennett	Humanitarian Application
123	A VoIP Enabled Cooperative Network for Agricultiral Commerce in Amazon Peru	David Espinoza, Alan Mickelson, Jared Leventhal, Christie Ritter, River Quispe, Leopoldo Linan	Water & Agriculture
124	A Review of Direct and Indirect Implications of Laser Land Leveling as Agriculture Resource Conservation Tecnology in Punjab Province of Pakistan	Leena Maqsood, Tariq Mahmood Khalil	Water & Agriculture
126	WSN-SA: Design Foundations for Situational Awareness Systems Based on Sensor Networks	Agnelo Silva, Mingyan Liu, Mahta Moghaddam	Disaster
128	Design and Implementation of a Test Rig for Disruption of Unexploded Ordnance	Mark Jeunnette, Gim Song Soh	Humanitarian Challenge & Opportunity
133	Technologically Enabling Resource-constrained Enterprises in Developing Nations Through The Implementation of E-Commerce on-Demand Service Portals for a Grid Utility Computing Platform	Babafemi Odusote	Connectivity & Communication
134	Entrepreneurship as an IEEE Workforce Development Theme	Tinus Stander, Saurabh Sinha	Humanitarian Challenge & Opportunity
139	Municipal Solid Waste Management In Bangalore And The Concept Of Mini Biogas Plant In Urban Localities	Suchitra Ramesh, Asif Usman, Adil Usman, Divakar BP	Humanitarian Application
143	Inclusive Community Engagement in Social Innovation, case Africa	Gertjan Van Stam	Humanitarian Application
144	The CSI Story: IEEE PES Community Solutions Initiative	Raymond Larsen, Robin Podmore, Michelle Lacourciere, Patrick Ryan, Derek Welbourn, Daniel Wessner	Energy
146	eLearning in Africa and the Opportunity for Innovative Credentialing	Gertjan Van Stam	Education
148	Challenges Facing Medical Data Digitization in Low-Resource Contexts	Alex Shovlin, Mike Ghen, Khanjan Mehta, Peter Simpson	Health

IEEE GHTC 2013 - Accepted Papers for Oral Presentation

Paper ID	Paper Title	Author Names	Track
151	Customizable Timing Control Device for Natural Gas Home Appliances to Save Natural Gas	Assad Iqbal, Muhammad Shamoon Khan, Sangeen Khan, Sajjad Hussain Shah	Energy
152	Creating Shared Value by aligning Business and Social Objectives through the Application of Technology	Suyash Chopra, Narayana Mandaleeka	Humanitarian Challenge & Opportunity
153	Cloud Based Health Care Delivery Model For Affordable and Accessible Health Services in Rural/Semi Urban India	Partha Pandey, Sharad Kumar, Dhrubes Biswas	Health
154	CrowdHelp: a Crowdsourcing Application for Improving Disaster Management	Liliya Besaleva, Alfred Weaver	Disaster
155	A Low Power Control System Optimized for Solar Thermal Power Generation	Darick LaSelle	Energy
157	Sanitation Quality Index and its Relation With Diarrheal Prevalence in Pallikaranai, Southern Chennai, India	Gowri Velu, Lavanya Vaidhyanathan	Health
159	Sustainable Solar Electrification for Rural Communities in Cameroon	Michael Wilson, Jude Numfor	Energy
161	Microgrid Test Bench for Small-Scale Renewable Microsources	Michael Rios, Giri Venkataramanan	Energy
163	Transforming In-kind Giving in Disaster Response: A Case for On-line Donation Registry with Retailers	Md. Islam, John Vande Vate, Alex Nordenson, John Heggestuen, Katherine Dolan	Disaster
164	The Economic Challenge of Rural Electrification: Community Solutions Initiative in Africa	Seth Myers	Energy
165	StreetConnect – Apps for Homeless People	Silvia Figueira, Natalie Linnell	Humanitarian Challenge & Opportunity
166	South Sudan Rural Electrification Project	Ronald Moulton, Mou Riiny	Energy
170	A Holistic Optimization Framework for Improving Ceramic Pot Filter Performance	Amelia Servi, Peter Kang, Susan Murcott, Daniel Frey	Water & Agriculture
172	Feasibility of Rain Water Harvesting on Scott Laboratory	Deep Shah	Water & Agriculture
174	Motivating Interest in Electrical Engineering Through Altruism at the Middle School Level	Thomas McKay, Carter Milhous	Education
177	Using Earth observations to enhance water resources decision-making and disaster assessment processes in the United States and the developing world	Christine Lee, Sarah Hemmings, Nancy Serby	Humanitarian Application
178	Humanitarian Opportunities In The Network Age	Maryam Heidaripour, Vahid Choopankareh, Jamshid Emami	Humanitarian Challenge & Opportunity
179	Sub-micrometer salt aerosol production: Marine cloud brightening	Armand Neukermans	Humanitarian Application