



LowCost3D 2014

Sensors, Algorithms, Applications

| Tuesday 2nd December 2014 | | |
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| Time | Programme | Speaker |
| Session 0 | | |
| 14:45 | Introductory session | |
| 15:00 | Keynote speech - "Potential and limitations of Low Cost 3D Systems" | Prof. Thomas P. Kersten, HCU Hamburg |
| 15:30 | Coffee Break | |
| Session 1: Surveying and Mapping | | |
| 15:45 | Development of a New Low-Cost Indoor Mapping System - System Design, System Calibration and First Results | Kersten, T. P.; Stallmann, D.; Tschirschwitz, F. |
| 16:15 | The Trimble V10 system in registration of cultural heritage - case study | Markiewicz, J.; Kowalczyk, M. |
| 16:45 | Automatic low-cost 360° reflector for high accuracy in kinematic application | Keller, F.; Kagerah, S.; Sternberg, H. |
| 17:15 | Coffee Break | |
| Session 2: Aerial platforms | | |
| 17:30 | Challenges and limitations in UAV-Photogrammetry | Fick, S. |
| 18:00 | UAV-based Acquisition of TIR-attributed 3D Point Clouds for Building Energy Evaluation | Westfeld, P.; Mader, D.; Blaskow, R.; Maas, H. |
| 18:30 | Helium balloons for 3D modelling: off to a flying start? | Lonneville, B.; Stal, C.; De Roo, B.; |
| from 19 | Poster Session and Demos | |

Location:

Institut für Geodäsie und Geoinformationstechnik

Technische Universität Berlin, Hauptgebäude

Straße des 17. Juni 135

10623 Berlin

| Wednesday 5. Dezember 2012 | | |
|---|--|--|
| Time | Programme | Speaker |
| Session 1: Low Cost Systems | | |
| 09:00 | Interactive 3D Visualisation of Architectural and Archaeological Models Using a Game Engine and Low-Cost-Systems | Tschirschwitz, F.; Kersten, T. P.; Zobel, K. |
| 09:30 | Development of a real time low-cost tracking system for medical and audiological problems | Pilinski, J.; Luhmann, T. |
| 10:00 | A comparison of radial distortion calibration methods applied to low cost cameras | Masiero, A.; Fissore, F.; Guarnieri, A.; Pirotti, F.; Vettore, A. |
| 10:30 | Coffee Break | |
| Session 2: Cultural Heritage and Archaeology | | |
| 10:45 | In-situ image-based 3d modelling for archaeological applications | Stal, C.; Lonneville, B.; De Gelder, K.; De Maeyer, P.; Dierkens, G. |
| 11:15 | SFM digital survey and modelling for the museum of the sculptures of the Basilica of St. Silvestro, catacombs of Priscilla in Rome | Pecchioli, L.; Verdiani, G.; Pucci, M. |
| 11:45 | Acquisition of cultural heritage documentation by utilization of popular cameras | Kowalczyk, M.; Markiewicz, J. |
| 12:15 | ISEE-Based method for information retrieving for historical Baalbek | Alamouri, A.; Pecchioli, L. |
| 12:45 | Lunch Break | |
| Session 3: RGBD-Sensors | | |
| 14:00 | Taxonomy of 3d sensors: A survey of state-of-the-art low cost 3d-reconstruction sensors and their field of application | Schöning, J.; Pardowitz, M.; Heidemann, G. |
| 14:30 | Tensor decomposition of dynamic 3D face models created using Microsoft Kinect | Romaszewski, M.; Sochan, A.; Skabek, K. |
| 15:00 | Fast Depth Map Fusion using OpenCL | Zagoruyko, S.; Chernov, V. |
| 15:30 | Microsoft Kinect first and second generation: sensors comparison and accuracy assessment | Ravanelli, R.; Nascetti, A.; Crespi, M. |
| 16:00 | Coffee Break | |
| Session 4 | | |
| 16.15 | A work flow for the semi-automatic generation of low cost 3d city models | Prieto, I.; Izgara, J. L.; Béjar, R. |
| 16:45 | Low cost magnetic resonance imaging - an alternative 3D scanning approach | Wetterling, F. |
| 17:15 | Closing Session | |

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