Advanced 3D Imaging for Safety and Security
A3DISS 2005
In Conjunction with CVPR 2005
June 25, 2005, San Diego, CA
The Catamaran Resort, Room: Cockatoo

Workshop Program

Keynote Talk
8:30-9:10 3D Assisted Face Recognition: A Survey of 3D Imaging, Modelling and Recognition Approaches
J. Kittler, A. Hilton, M. Hamouz, and J. Illingworth, University of Surrey, UK

Session 1: Safety and Security Applications - Part 1
9:10-9:35 Synthetic Aperture Focusing using a Shear-Warp Factorization of the Viewing Transform
V. Vaish, G. Garg, E.-V. Talvala, E. Antunez, B. Wilburn, M. Horowitz, and M. Levoy, Stanford University, Stanford, CA
9:35-10:00 3D Measurements in Cargo Inspection with a Gamma-Ray Linear Pushbroom Stereo System,
Z. Zhu, L. Zhao, and J. Lei, City University of New York, NY
10:00-10:30 Coffee break

Session 2: 3D Face Recognition
10:30-10:55 3D Face Recognition Using Two Views Face Modeling and Labeling
Y. Sun and L. Yin, State University of New York at Binghamton, NY
10:55-11:20 Detection of Anchor Points for 3D Face Verification
D. Colbry, G. Stockman, and A. Jain, Michigan State University, MI
11:20-11:45 A New Method for Automatic 3D Face Registration
V. R. Ayyagari, F. Boughorbel, A. Koschan, and M. A. Abidi, University of Tennessee, TN
11:45-12:10 Matching Tensors for Pose Invariant Automatic 3D Face Recognition
A. S. Mian, M. Bennamoun, and R. A. Owens, University of Western Australia
12:10-1:30 Lunch break

1:30-2:35 Poster Session
- 3D Facial Normalization with Spin Images and Influence of Range Data Calculation over Face Verification
  C. Conde, A. Serrano, L. J. Rodríguez-Aragón, and E. Cabello, Universidad Rey Juan Carlos, Madrid, Spain
- Single Camera Stereo for Mobile Robot Surveillance
• Instant Scene Modeler for Crime Scene Reconstruction
  S. Se and P. Jasiobedzki, MDA Space Missions, Ontario, Canada
• Least squares fitting of articulated objects
  C. Grönwall, P. Andersson, FOI Laser Systems, Sweden, and F. Gustafsson, Linköping University, Sweden

**Session 3: Safety and Security Applications - Part 2**

2:35-3:00  3D and Moving Target Extraction from Dynamic Pushbroom Stereo Mosaics
  Z. Zhu, H. Tang, B. Shen, and G. Wolberg, City University of New York, NY

3:00-3:30  Coffee break

3:30-3:55  3D Modeling of Indoor Environments for a Robotic Security Guard
  P. Biber, S. Fleck, University of Tübingen, Germany, and T. Duckett, Örebro University, Sweden

3:55-4:20  3D Site Modelling and Verification of Plant Design for Nuclear Security Applications
  V. Sequeira, G. Boström, M. Fiocco, D. Puig, and J. G.M. Gonçalves, European Commission - Joint Research Centre, Italy

**Session 4: Ear Biometrics**

4:20-4:45  Ear Biometrics Using 2D and 3D Images
  P. Yan and K.W. Bowyer, University of Notre Dame, IN

4:45-5:10  Shape Model-Based 3D Ear Detection from Side Face Range Images
  H. Chen and B. Bhanu, University of California, Riverside, CA

5:10       Adjourn