CALL FOR PAPERS

Third Workshop on Visual Analysis of Satellite to Street View Imagery

Previously:
Visual Analysis and Geo-Localization of Large-Scale Imagery (ECCV12, CVPR’13)
Computer Vision for Converging Perspectives (ICCV’13,
Vision from Satellite to Street (ICCV’15)

In conjunction with CVPR 2016, Las Vegas, Nevada                  July 1, 2016

Seeing the world from diverse perspectives provides us a unique opportunity to understand it better. Today, we live in a world with devices ranging from first-person vision systems (such as smart phones) to space-borne imaging platforms (such as satellites) sensing the world around us from wildly different perspectives and with diverse data modalities. The images captured from these different perspectives are complementary, and so analyzing them together provides novel solutions for understanding and describing the world better. The key to integrating these different perspectives is location.

Despite recent advances in computer vision and large-scale indexing techniques, fine-grained fusion of data with different views of the geo-location remains a challenging task. The problem involves identifying, extracting, and indexing geo-informative features, discovering subtle overlapping geo-location cues from wildly diverse visual data, geometric modeling and reasoning, context-based reasoning, and exploitation and indexing of large-scale aerial and ground. Theoretical foundations from computer graphics, vision, photogrammetry, and robotics can be useful assets in solving the problem. We feel that due to the growing availability of geo-referenced images and videos, the time is right to investigate the research challenges and opportunities involved with jointly analyzing images and videos captured from different devices and from wildly varying perspectives but pointing to the same 3D point in space. Combining this heterogeneous visual data could lead to improved data organization strategies, event understanding systems, and transformative solutions for computer vision challenges. The focus of this workshop therefore is to explore techniques that can exploit the rich data provided by converging perspectives - images captured by first-person cameras and aerial images delivered by various air/space-borne sensors.

Papers should describe original and unpublished work. Each paper will receive double blind reviews, moderated by the workshop chairs. There will be a Google sponsored best paper award and an NVIDIA sponsored award

Invited Speakers (Tentative)
Jana Kosecka  George Mason Univ., USA
Torsten Sattler ETH Zurich, Switzerland
Nathan Jacobs Univ. of Kentucky, USA
Martial Hebert Carnegie Mellon Univ., USA
John Leonard Massachusetts Institute of Technology, USA
Himaanu Gupta Nokia Here, USA
Raquel Urtasun Univ. of Toronto, Canada

IMPORTANT DATES
Submissions deadline: March 27, 2016
Author notification: April 17, 2016
Camera-ready: May 2, 2016
Workshop: July 1, 2016

http://crcv.ucf.edu/cvpr-2016-workshop/