Call for Contributions
1. Inform the Chair: with the Title of your Contribution
2. Submission URL:
https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=GEOProcessing+2018+Special
Please select Track Preference as **LSST**

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Special track
LSST: Laser Scanning for Smart Cities

Chairs and Coordinators:
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along with
GEOProcessing 2018, The Tenth International Conference on Advanced Geographic Information Systems,
Applications, and Services
http://www.iaria.org/conferences2018/GEOProcessing18.html

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Laser scanning or Light Detection And Ranging (known as LiDAR) technology, deployable on terrestrial, mobile and aerial platforms, has been widely used to collect three-dimensional (3D) topographic data. For urban settings, LiDAR can be used to collect data to reconstruct 3D models (e.g. buildings, roads, road furniture, bridges, utility corridors, harbors, airports) with high precision documenting gross and fine features as small as utility lines and individual bricks. Semantic data describing urban objects can also be automatically identified from LiDAR through developments in computer vision, computer graphics, and artificial intelligent particularly.

A smart city is a complex concept, which can consist of 6 important components that also need to have smart aspects: economy, environment, mobility, people, living, and government. However, smart cities also refers to smart mechanisms for city management and operation. One of the fundamental components to this is 3D geo-spatial framework populated with meaningful representations of the actual infrastructure. This includes most basic geometric and semantic information of the 3D objects in a city residing in a 3D geo-spatial framework. Having them be accurate and comprehensive as part of the urban inventory is critical for comprehensive urban management and planning, 3D spatial temporal modeling, intelligent environmental monitoring, smart transportation, and emergency management both before and after an incident. However, automatic reconstruction and semantic information extraction of a 3D spatial infrastructure for the smart city remains a formidable challenge, which requires significant expertise across multi-domains (e.g., computer sciences, civil engineering, and geomatics).

The main objective of the track is to explore the capabilities of LiDAR data for generating geometric and sematic information of 3D object models of a city. This track will highlight cutting-edge innovation in 3D processing, modeling, data fusion, visualization, and data management from a point cloud data (e.g. from laser sensors or photogrammetry-based).

Topics include, but not limited to:

- Data acquisition
- Building extraction and modeling
- Semantic 3D modeling
- Transportation infrastructure

- Digital surface model and digital elevation model
- Urban infrastructure monitoring
- City BIM
- Multiresolution, multiscale and multidimensional visualizations
- Accuracy and performance evaluations
- New application and concepts using laser scanning for urban
- New urban LIDAR developments
- Solar potential analysis

Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaria.org]
- Presentations: slide only [slide-deck posted on www.iaria.org]
- Demos: two pages [posted on www.iaria.org]

Important Datelines

- Inform the Chair: As soon as you decided to contribute
Submission: December 7, 2017
Notification: January 12, 2018
Registration: January 26, 2018
Camera ready: February 5, 2018

Note: These deadlines are somewhat flexible, providing arrangements are made ahead of time with the chair.

Paper Format
- See: http://www.iaria.org/format.html
- Before submission, please check and comply with the editorial rules: http://www.iaria.org/editorialrules.html

Publications
- Extended versions of selected papers will be published in IARIA Journals: http://www.iariajournals.org
- Print proceedings will be available via Curran Associates, Inc.: http://www.proceedings.com/9769.html
- Articles will be archived in the free access ThinkMind Digital Library: http://www.thinkmind.org

- Conference proceedings are sent for indexing to ISI Thomson Reuters by Filodiritto/InFOROmatica Publisher, Italy
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Paper Submission
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Registration
- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at http://www.iaria.org/registration.html

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