

Buildings II

Chair: Baillard C

15:30 **Improving image segmentation using multiple view analysis**

Drauschke M, Roscher R, Läbe T, Förstner F

15:55 **Refining building facade models with images**

Pu S, Vosselman G

16:20 **An unsupervised hierarchical segmentation of a facade building image in elementary 2d - models**

Burochin JP, Tournaire O, Paparoditis N

16:45 **Grammar supported facade reconstruction from mobile lidar mapping**

Becker S, Haala N

17:15 **Closing**

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Program

CMRT09

**Object Extraction for 3D City Models,
 Road Databases and Traffic Monitoring
 Concepts, Algorithms, and Evaluation**

September 3–4, 2009

Paris, France

Organized by



ISPRS Working Group III / 4

ISPRS Working Group III / 5

MATIS Laboratory, Institut Géographique National, Saint-Mandé, France



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SEP-3, Thursday

9:00 **Opening**

Invited Talk

Chair: Paparoditis N

9:30 **Marked point processes for object extraction in high resolution images. Application to Earth observation and cartography**
Zerubia J

10:30 **Coffee Break**

Roads

Chair: Gerke M

11:00 **Efficient road mapping via interactive image segmentation**
Barinova O, Shapovalov R, Sudakov S, Velizhev A, Konushin A

11:25 **Surface modelling for road networks using multi-source geodata**
Lo CY, Chen LC, Chen CT, Chen JX

11:50 **Automatic extraction of urban objects from multi-source aerial data**
Mancini A, Frontoni E, Zingaretti P

12:15 **Road roundabout extraction from very high resolution aerial imagery**
Ravanbakhsh M, Fraser CS

12:45 **Lunch**

Poster Session

14:00 **Assessing the impact of digital surface models on road extraction in suburban areas by region-based road subgraph extraction**
Grote A, Rottensteiner F

Vehicle activity indication from airborne lidar data of urban areas by binary shape classification of point sets
Yao W, Hinz S, Stilla U

Trajectory-based scene description and classification by analytical functions
Pfeiffer D, Reulke R

3d building reconstruction from lidar based on a cell decomposition approach
Kada M, McKinley L

A semi-Automatic approach to object extraction from a combination of image and laser data
Mumtaz SA, Mooney K

Complex scene analysis in urban areas based on an ensemble clustering method applied on lidar data
Ramzi P, Samadzadegan F

Automated selection of terrestrial images from sequences for the texture mapping of 3d city models
Bnitez S, Baillard C

SEP-3, Thursday

14:00 **Extracting building footprints from 3d point clouds using terrestrial laser scanning at street levels**
Hammoudi K, Dornaika F, Paparoditis N

Comparison of methods for automated building extraction from high resolution image data
Vozikis G

Dense matching in high resolution oblique airborne images
Gerke M

Classification system of gis-objects using multi-sensorial imagery for near-realtime disaster management
Frey D, Butenuth M

Graph-based urban object model processing
Falkowski K, Ebert J

Semi-automatic city model extraction from tri-stereoscopic VHR satellite imagery
Tack F, Goossens R, Buyuksalih G

A proof of concept of iterative dsm improvement through sar scene simulation
Derauw D

An approach for navigation in 3d models on mobile devices
Jiang W, Yuguo W, Fan W

Extraction of buildings using images & lidar data and a combination of various methods
Demir N, Poli D, Baltsavias E

15:30 **Coffee Break**

Buildings I

Chair: Rottensteiner F

16:00 **Competing 3d priors for object extraction in remote sensing data**
Karantzos K, Paragios N

16:25 **Object extraction from lidar data using an artificial swarm bee colony clustering algorithm**
Saeedi S, Samadzadegan F, El-Sheimy N

16:50 **Building footprint database improvement for 3d reconstruction: a direction aware split and merge approach**
Vallet B, Pierrot-Deseilligny M, Boldo D

17:15 **A test of automatic building change detection approaches**
Champion N, Rottensteiner F, Matikainen L, Liang X, Hyyppä J, Olsen BP

20:00 **Dinner and Boat Cruise**

SEP-4, Friday

SAR

Chair: Stilla U

8:45 **Structure enhancement, and change detection**
Schmitt A, Wessel B, Roth A

9:10 **Ray tracing and SAR-tomography for 3d analysis of microwave scattering at man-made objects**
Auer S, Zhu X, Hinz S, Bamler R

9:35 **Theoretical analysis of building height estimation using spaceborne SAR-interferometry for rapid mapping applications**
Hinz S, Abelen S

10:00 **Fusion of optical and insar features for building recognition in urban areas**
Wegner JD, Thiele A, Soergel U

10:30 **Coffee Break**

Traffic & Navigation

Chair: Hinz S

11:00 **Fast vehicle detection and tracking in aerial image bursts**
Kozempel K, Reulke R

11:25 **Refining correctness of vehicle detection and tracking in aerial image sequences by means of velocity and trajectory evaluation**
Lenhart D, Hinz S

11:50 **Utilization of 3d city models and airborne laser scanning for terrain-based navigation of helicopters and UAVs**
Hebel M, Arens M, Stilla U

12:15 **Lunch**

Street Scenes

Chair: Butenuth M

13:45 **Study of sift descriptors for image matching based localization in urban street view context**
Picard D, Cord M, Valle E

14:10 **Text extraction from street level images**
Fabrizio J, Cord M, Marcotegui B

14:35 **Circular road sign extraction from street level images using colour, shape and texture database maps**
Arlicot A, Soheilian B, Paparoditis N

15:00 **Coffee Break**