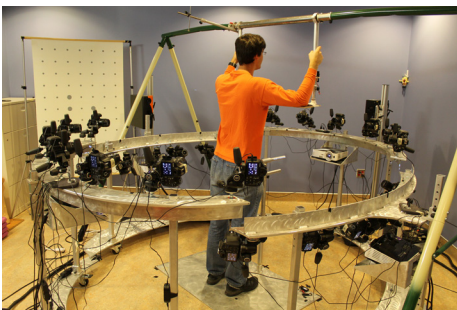


PURDUE UNIVERSITY

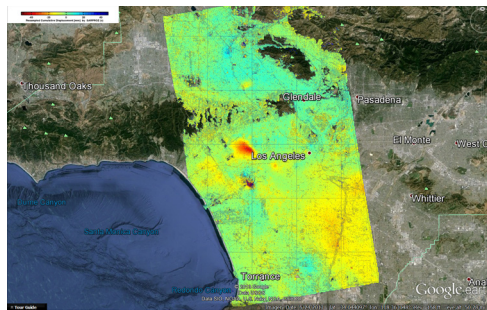
LYLES SCHOOL
OF CIVIL ENGINEERING

Graduate Study in Geomatics Engineering

Graduate study curricula are available in Photogrammetry, Remote Sensing, Radar Imaging, Laser Scanning, Geographic Information Systems, Surveying, Estimation, and a variety of cross disciplinary subjects. The MS degree, with thesis or courses only, is available in both traditional, on campus mode as well as by distance learning. The PhD degree provides an opportunity for extended, in depth research investigations.



Digital imaging system for biomedical applications



Cumulative Displacement from 80 TerraSAR-X Images



Photogrammetric Applications Developed for Smartphone Devices

Civil Engineering Courses

- CE 506 Adjustment of Geospatial Observations
- CE 503 Digital Photogrammetry
- CE 505 Radar Remote Sensing
- CE 507 Multi & Hyperspectral Remote Sensing
- CE 508 Geographic Information Systems
- CE 509 Lidar Sensor Modeling & Applications
- CE 510 Geometric Geodesy & Conformal Mapping
- CE 562 Geometric Design of Highways
- CE 697 Satellite Photogrammetry
- CE 697 SAR Interferometry

Related Area Courses

- AAE 575 GNSS Navigation and Positioning
- AAE 532 Orbit Mechanics

AAE 490 UAS Control Design

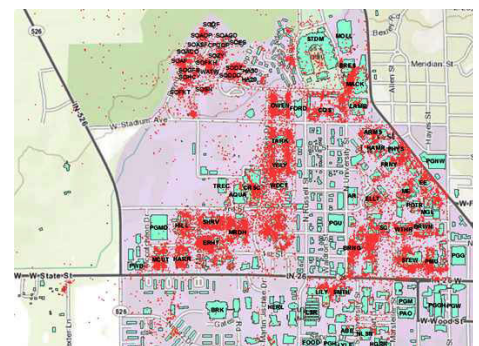
- AAE 568 Applied Optimal Control & Estimation
- AAE 364 Control Systems Analysis & Laboratory
- AAE 564 Systems Analysis and Synthesis
- AAE 567 Applied Stochastic Processes
- ECE 637 Digital Image Processing
- ECE 661 Computer Vision
- ECE 678 Radar Engineering
- ECE 577 Engineering Aspects of Remote Sensing
- ECE 580 Optimization Methods for Sys. & Control
- CS 580 Algorithm Design & Implementation
- MATH 511 Linear Algebra
- STAT 511 Probability and Statistics
- STAT 512 Regression and Analysis of Variance



Photogrammetrically Produced Building Models on Orthophoto Base

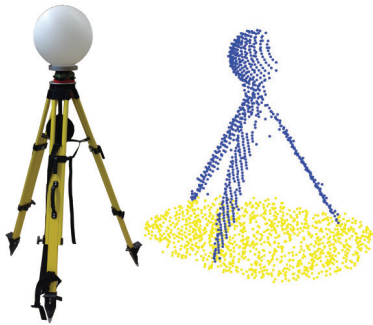


Lidar Point Cloud near the Hampton Civil Engineering Building



Geo-Location and Density of Tweets on the Purdue Campus

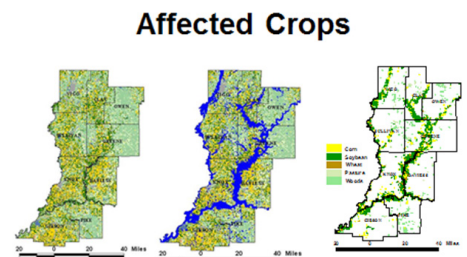
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Jie Shan	Geographic Information Systems, Geographic Analysis of Social Media, Location Based Services, Planetary Mapping	765-494-2168	jshan@purdue.edu



3D Target and Point Cloud for Accuracy Evaluation in Mobile Mapping



Student Operator and Multi-Rotor UAV for Local Image Capture



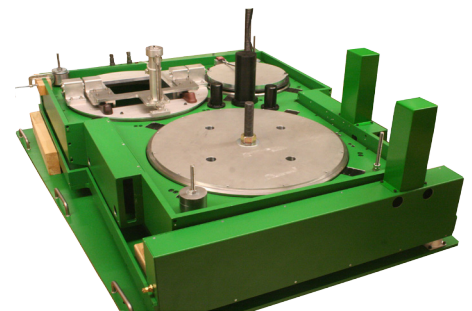
Crop Data Layer, Flooding Extents, and Damaged Crops in Counties in Southern Indiana (2008)



Students Collecting Point Cloud Data Using a Static Laser Scanner



Dense Reconstruction (Point Cloud) of Steel Girder by Close Range Photogrammetry



Large Stabilized Platform for Three Aerial Sensors, with FMC for One of the Sensors

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