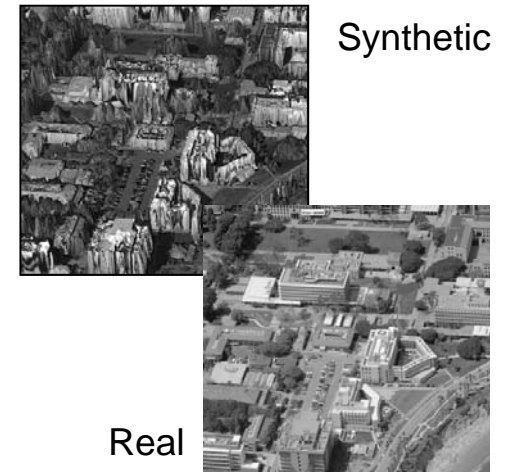
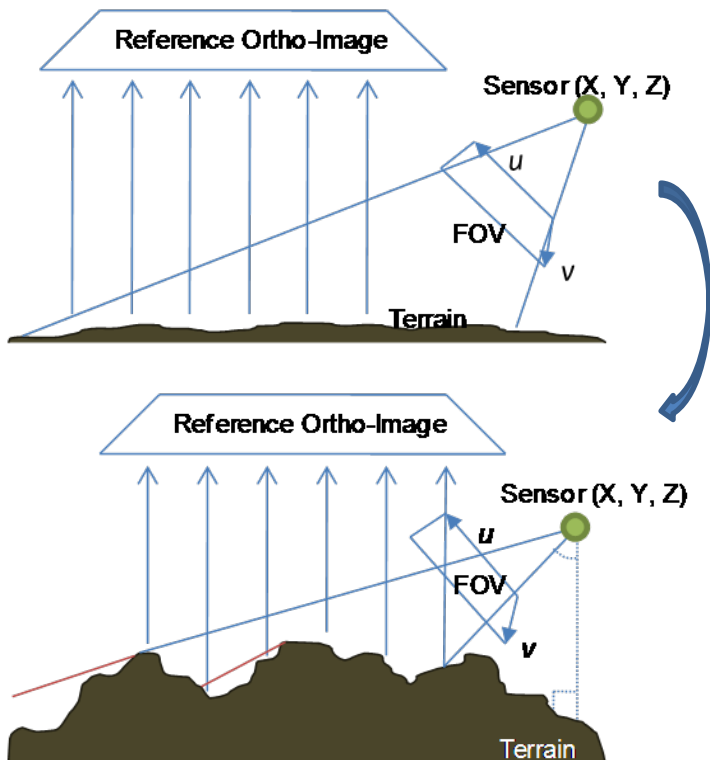




- Toyon Research Corporation
 - A small business with over twenty years of experience in information analysis, simulation, and video processing algorithm development
 - Offices in Santa Barbara, CA and Sterling, VA
 - Top Secret facility and storage rating (DCID 6/9 facility) with classified computing capabilities
- Dr. Michael Moore (mmoore@toyon.com)
 - Develops algorithms and software for processing images and video
 - Led video-based geo-registration efforts on contracts for two DoD organizations
- We are not currently on a team, but seek to join a team with complementary capabilities

- Automated video-based geo-registration necessitated by precision requirements.
- Evolution of method to handle real-world complexity and platform variety
- Extension of airborne methods to ground-based problems

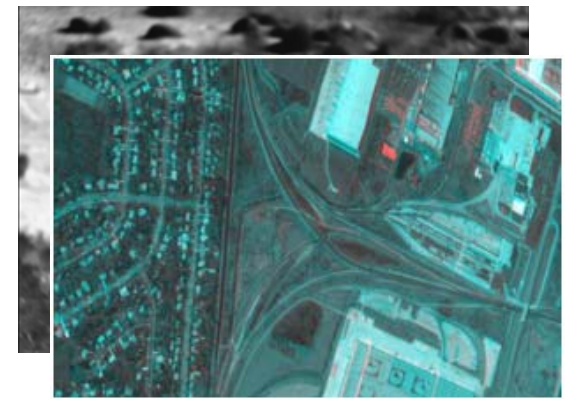


Algorithm Progression

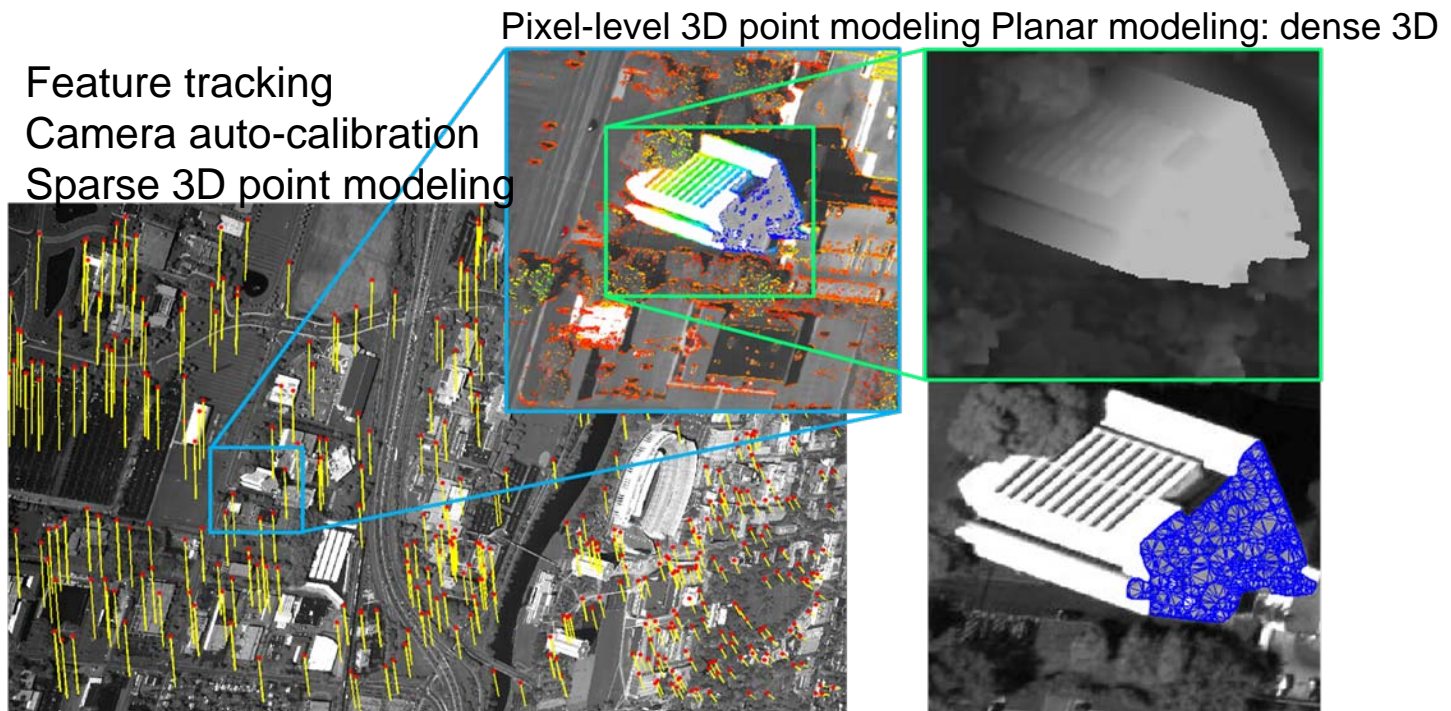
Reference projection	➔	Sensor projection
2D Matching		2- and 3D Matching
Existing 3D data		Self-generated 3D
Image features		Scene features & objects
Airborne perspective		Ground-based perspective



- We have expertise in several component modules necessary for image- or video-based geo-registration:
 - Content robust projection and matching methods
 - Generation of 3D models from 2D video streams
 - Automated image feature generation, classification, and matching
- Toyon has produced multiple software products fielded in DoD and commercial applications
 - Physics-based simulation tools for large scale systems analysis (SLAMEM)
 - Straight-forward analysis tools for geo-spatial analysis (GAPS)
 - Robust video analytics for automated detection, tracking, and classification (IPVT)



- We are interested in joining teams which will complement our capabilities
 - Crowd-sourcing and other data gathering methods
 - Large database construction, maintenance, and use
- Example generation of 3D data using 2D data:





Contact Information

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