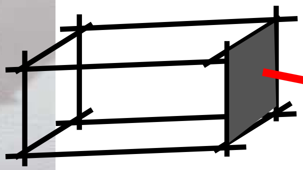
MIT City Scanning Project

PI: Seth Teller, MIT Computer Graphics Group



New Ideas

- Focus on acquiring CAD for existing urban environments
- Pose–camera (digital images, lat, long, alt, Euler angles)
- End–to–end system (Images to CAD models)
- No "human in the loop"
- Tackle systems issues (Tera–bytes of image, CAD data)

Impact

- Demonstrate integration of camera, inertial, GPS devices
- Fundamentally accelerate urban modeling task
- Address combinatorial/systems issues in machine vision algs.
- Explore design point: remove human from processing loop

Schedule (1997–98)

- Design, build, field–test pose–camera prototype
- Acquire "ground–truth" via traditional surveying
- Initial deployment of pose camera around MIT campus
- Algorithms for mosaicing, cor–respondence, reconstruction

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