

# MIT2000-05: A Multi-Cue Vision Person Tracking Module

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## Project Overview



This project will develop a multi-cue person tracking system that will integrate stereo range processing with other visual processing modalities for robust performance in active environments.

Goals:

- Low-cost
- Easily configurable
- Multiple vision cues
- Robust person tracking

Implementation using commercially available stereo head and laptop computer

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# Progress Through December 2000

Current focus: stereo range modality

New methods for fast and robust range estimation.

- Predictive disparity search
- Homogenous foreground region correspondence
- Long-term background acquisition: variable aperture and illumination

Part of system for integrated person tracking

- Integration of 3-D foreground data
- Trajectory estimation in plan view representation

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## Research Plan for the Next Six Months

- Implement real-time predictive disparity estimation
- Develop optimal aperture schedule
- Integrate flesh color tracking