REU Week 4

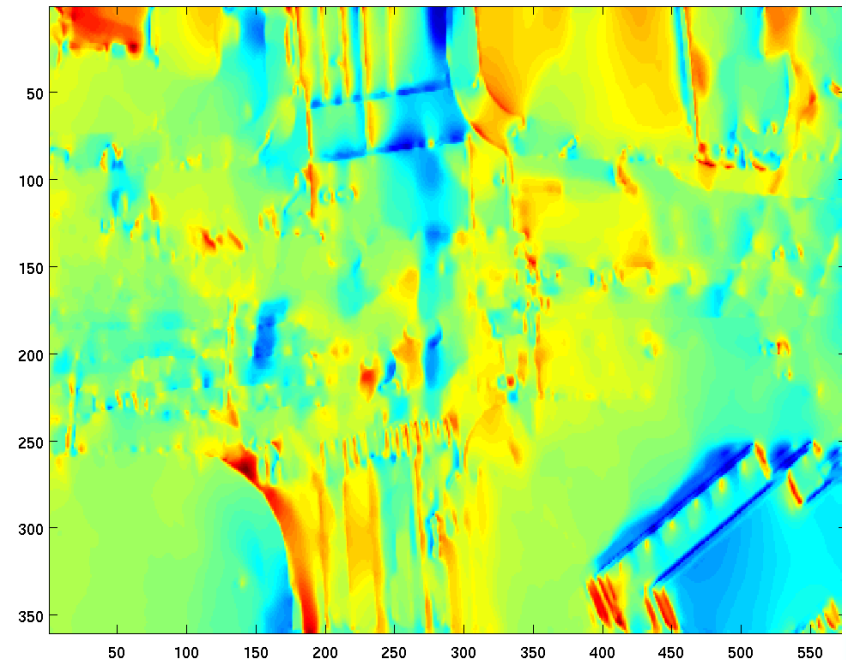# Learning Motion Patterns From Optical Flow

Related Work

- Imran Saleemi
  - Probabilistic model
  - Uses object tracking
  - $(x, y, x', y', \Delta t)$

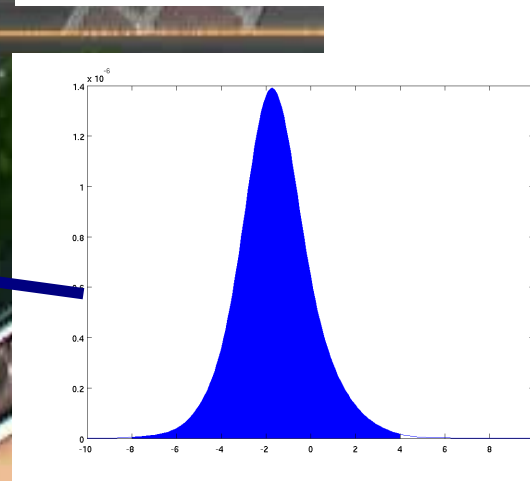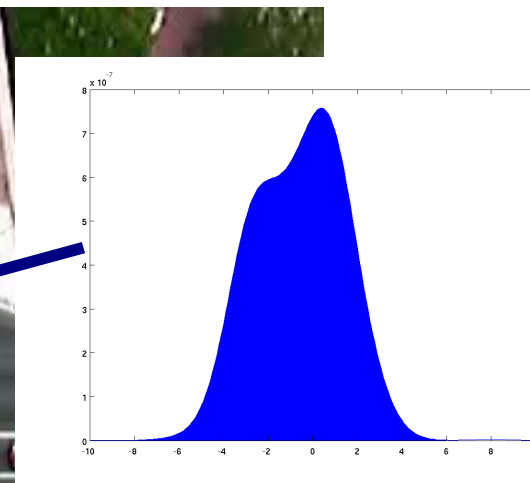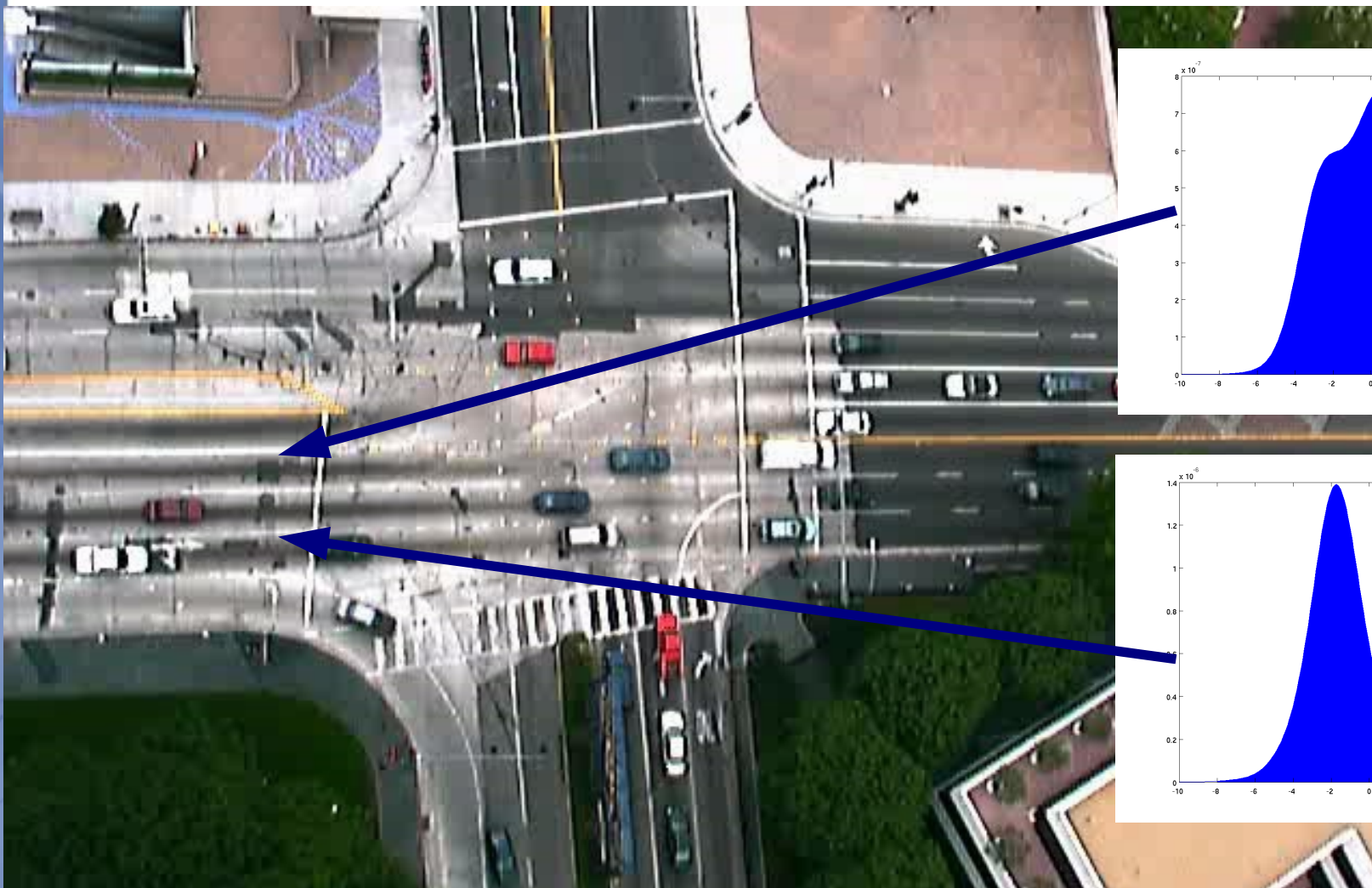(From Imran's paper)

Our Method

- Probabilistic model
  - Using optical flow
  - (x, y, u, v)
- Advantage
  - Avoids object tracking
- Challenge
  - Noise in pixel values

(u values for one pair of frames)

Evaluation

Current Work

- Finding motion patterns
    - Find the peaks in P(u | x,y) for every x,y
    - Cluster to find regions of similar motion

- Solving the noise problem
    - Discard areas with no motion