

# Enabling Versatile Image Representations Through Parallelism

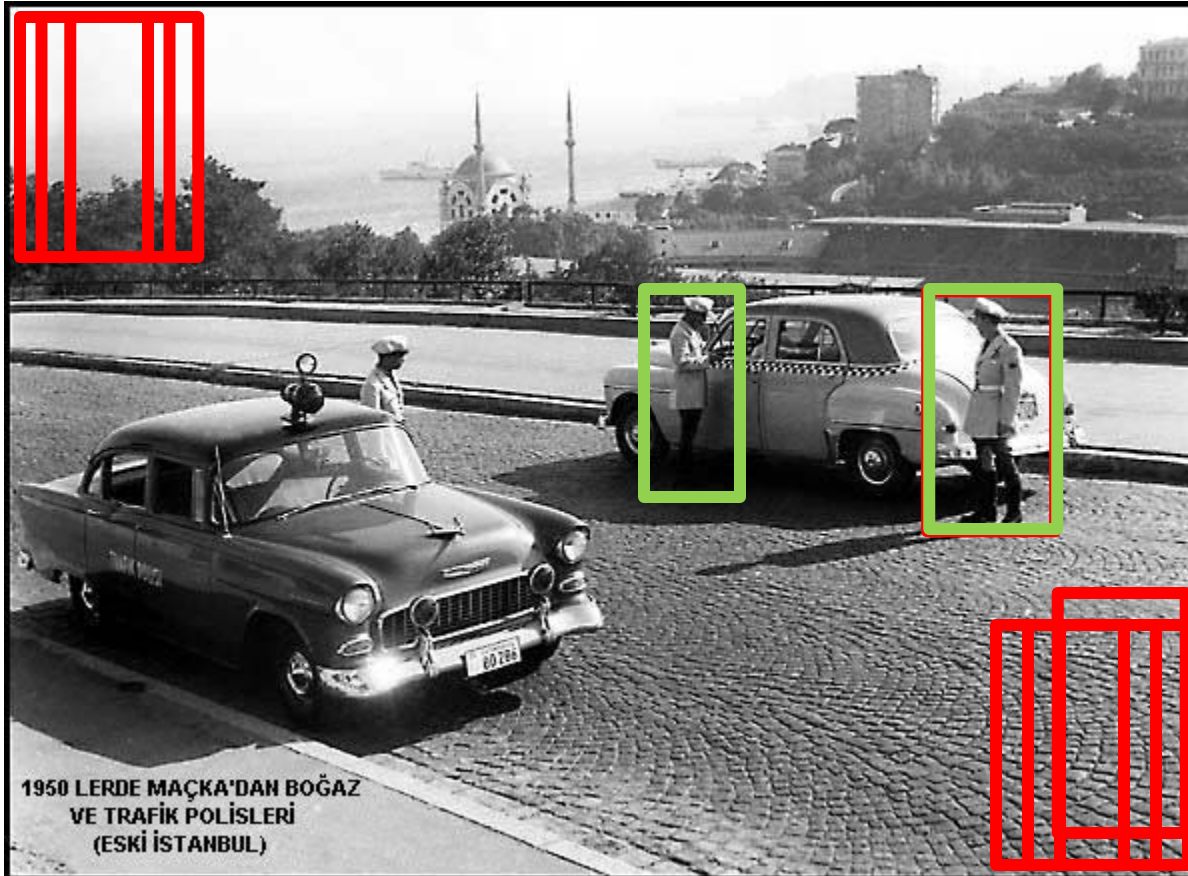
Mert Dikmen

Dept. Electrical and Computer Engineering

UPCRC - ViVid Project

Adviser: Thomas S. Huang

# How we detect things



- Sliding Window Detector
- Performance can be improved by geometric reasoning
- We concentrate on the detector
- Require
  - Very low false positive rate at a high detection performance

# Feature Extraction

# Classification

$F\_dim \times N\_windows$  floating point multiplies and adds

Typical 1MP Image :  $1000 \times 100K = 100M$  operations