

# Dynamic Resource-aware Corner Detection for Bio-inspired Vision Sensors

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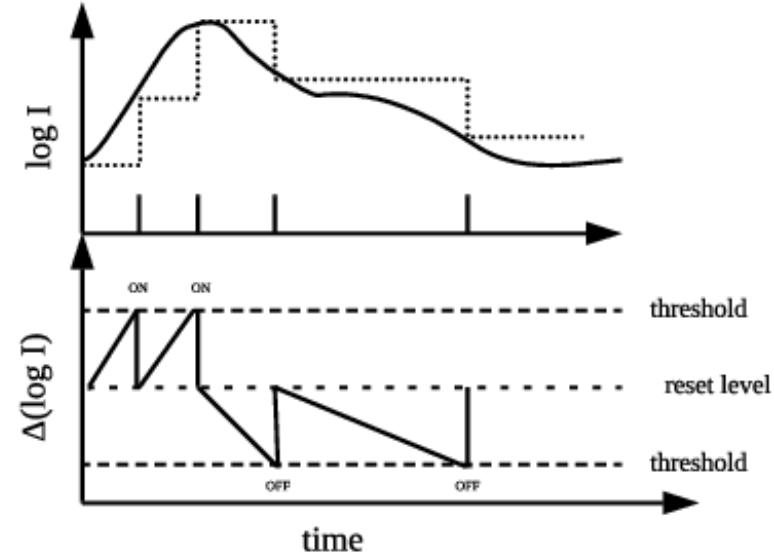
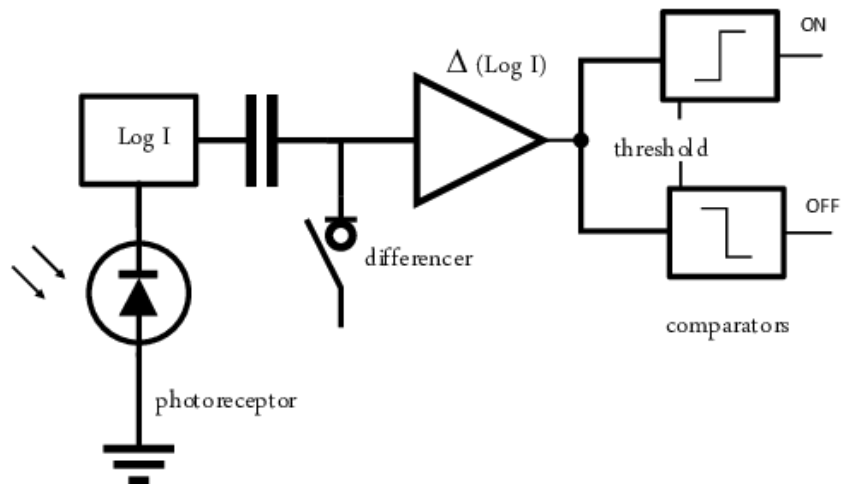
# ◀Content▶

- \* Event-based cameras
- \* Applications
- \* Problem ?
- \* Method
- \* Results

# {Event-based Cameras}

## \* DVS camera mechanism:

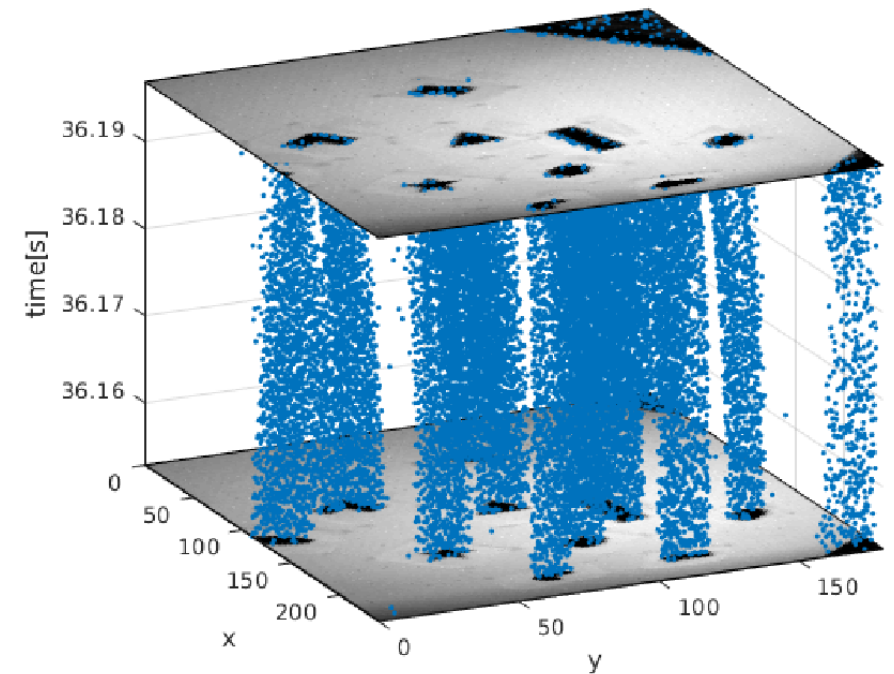
- brightness changes
- events  $(x, y, t, p)$



# {Event-based Cameras}

## \* Characteristics

- Asynchronous events
- Low latency  $\sim 10$   $\mu$ s
- High dynamic range  $\sim 140$  dB
- Low power consumptions  $\sim 10$  mW

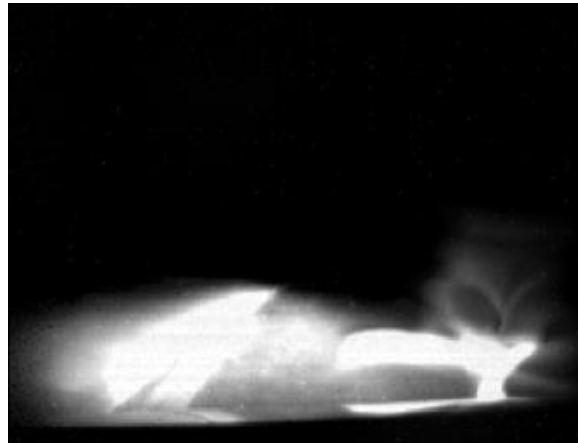


# {Applications}

- Localization
- Obstacle avoidance
- Object detection and tracking
- Depth estimation



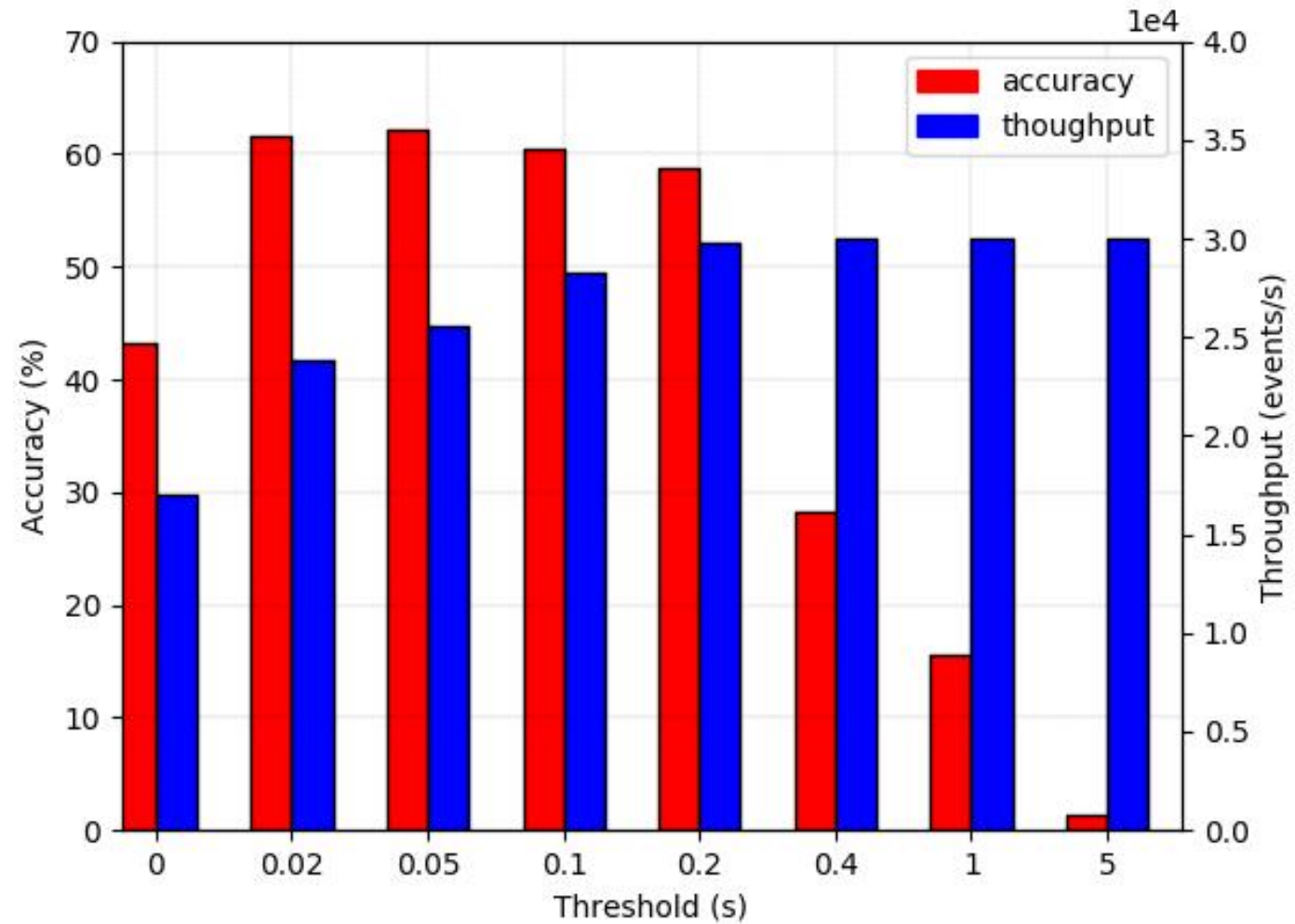
HDR scene



Low light

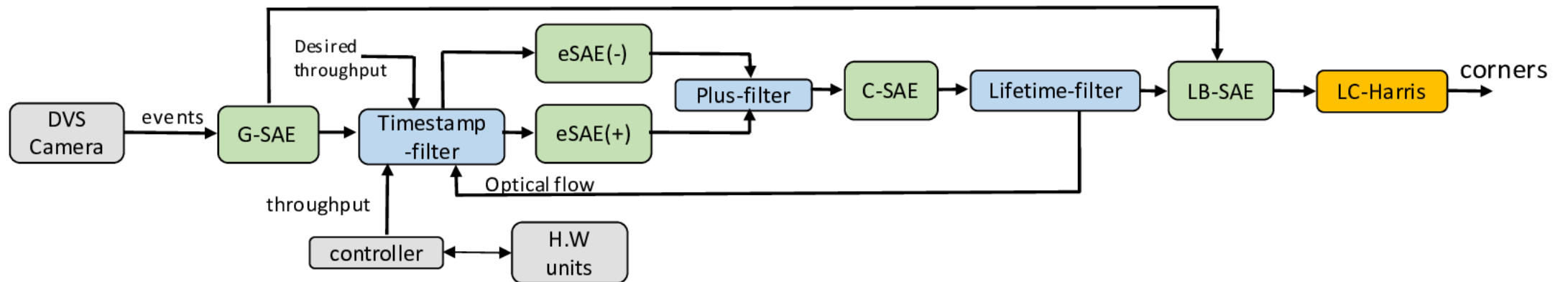


# {Problem}

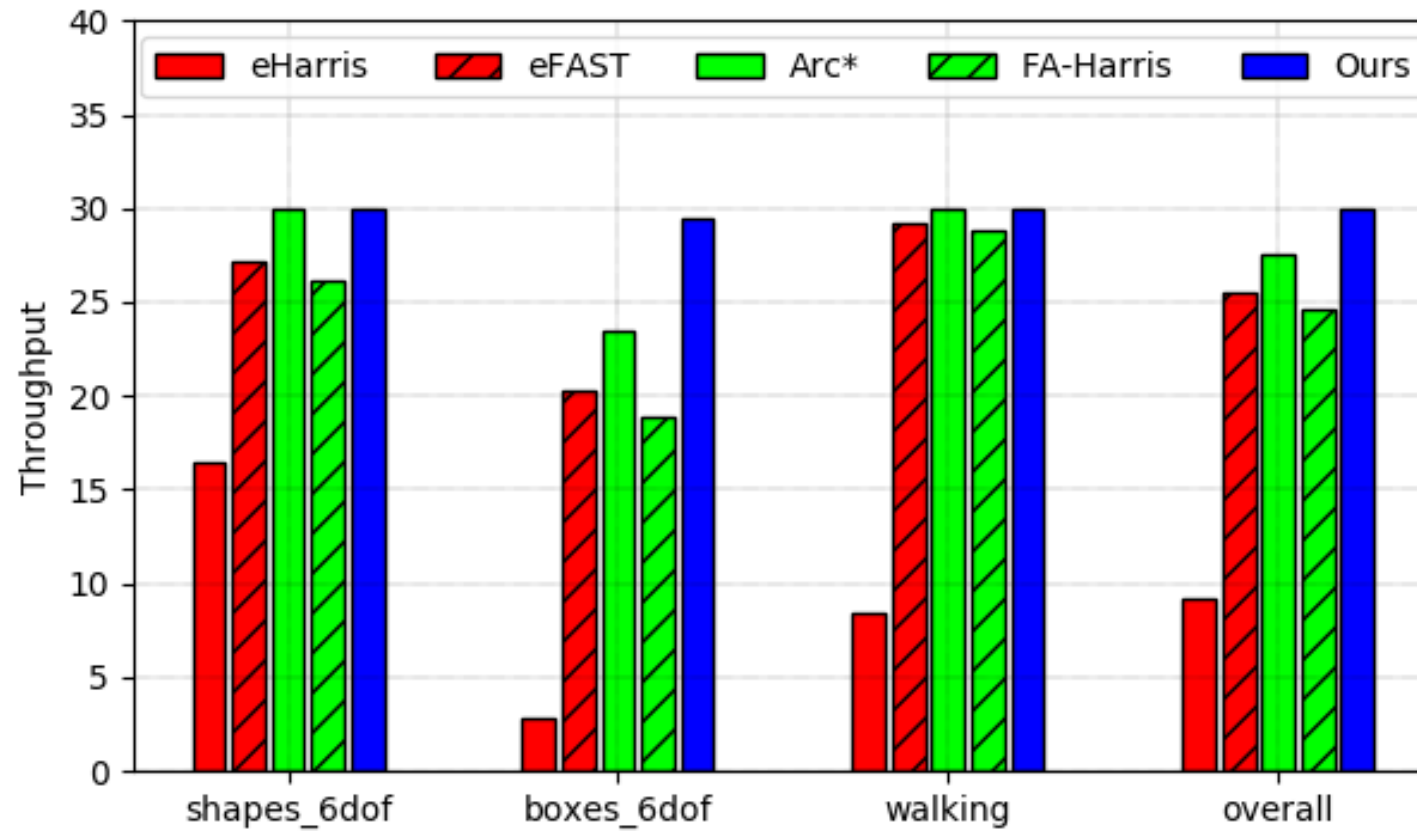


## { Method }

- Three-layer filtering
- LC-Harris
- Throughput controller



# {Results}







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