

# *Automobile Detection and Classification Through the Use of Computer Vision Techniques*

*First Quarter Report*

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## *Background and reasoning:*

- Existing license plate tracking technology
  - Need for specific vehicle detection
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## *Problem statement:*

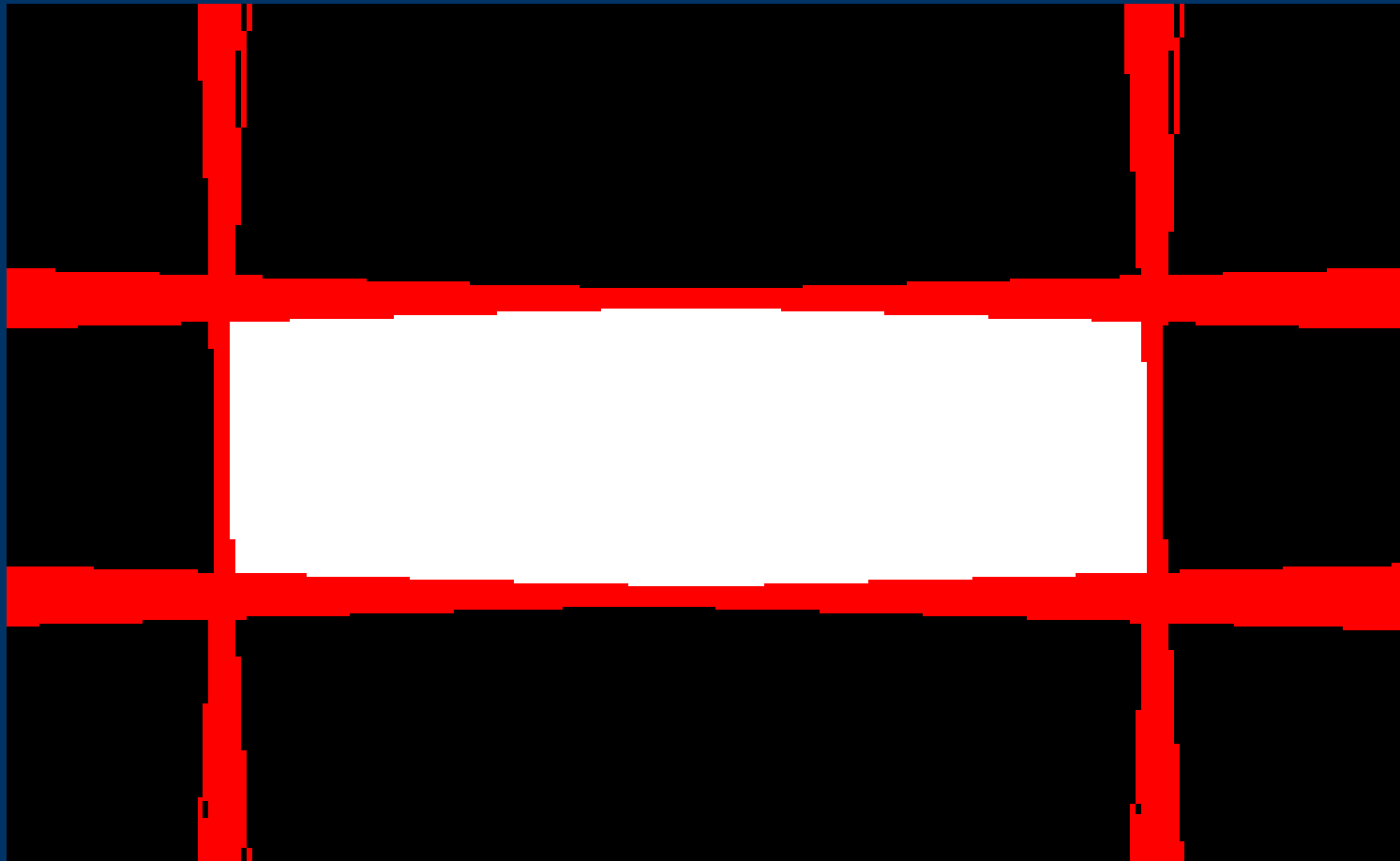
- Object isolation
    - Complicated by noise
  - Feature identification
    - Colour, size, shape...
  - Matching
    - Compare identifying qualities against database of automobile profiles
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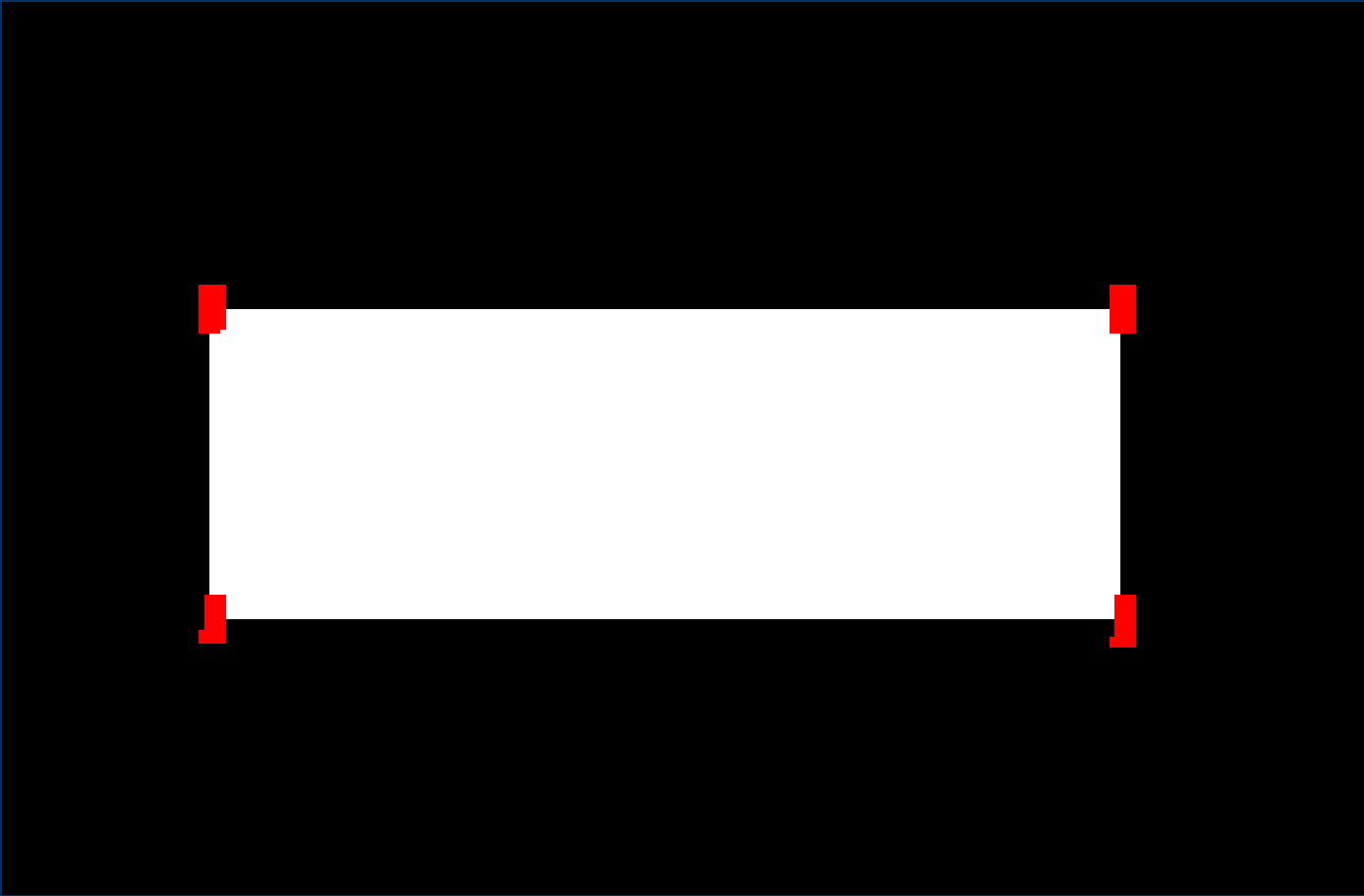
## *Progress:*

- Object Isolation
    - Block grouping, color categorization
  - Feature Identification
    - Edge detection, line detection (Hough transform)
  - Matching
    - Construction of testing database
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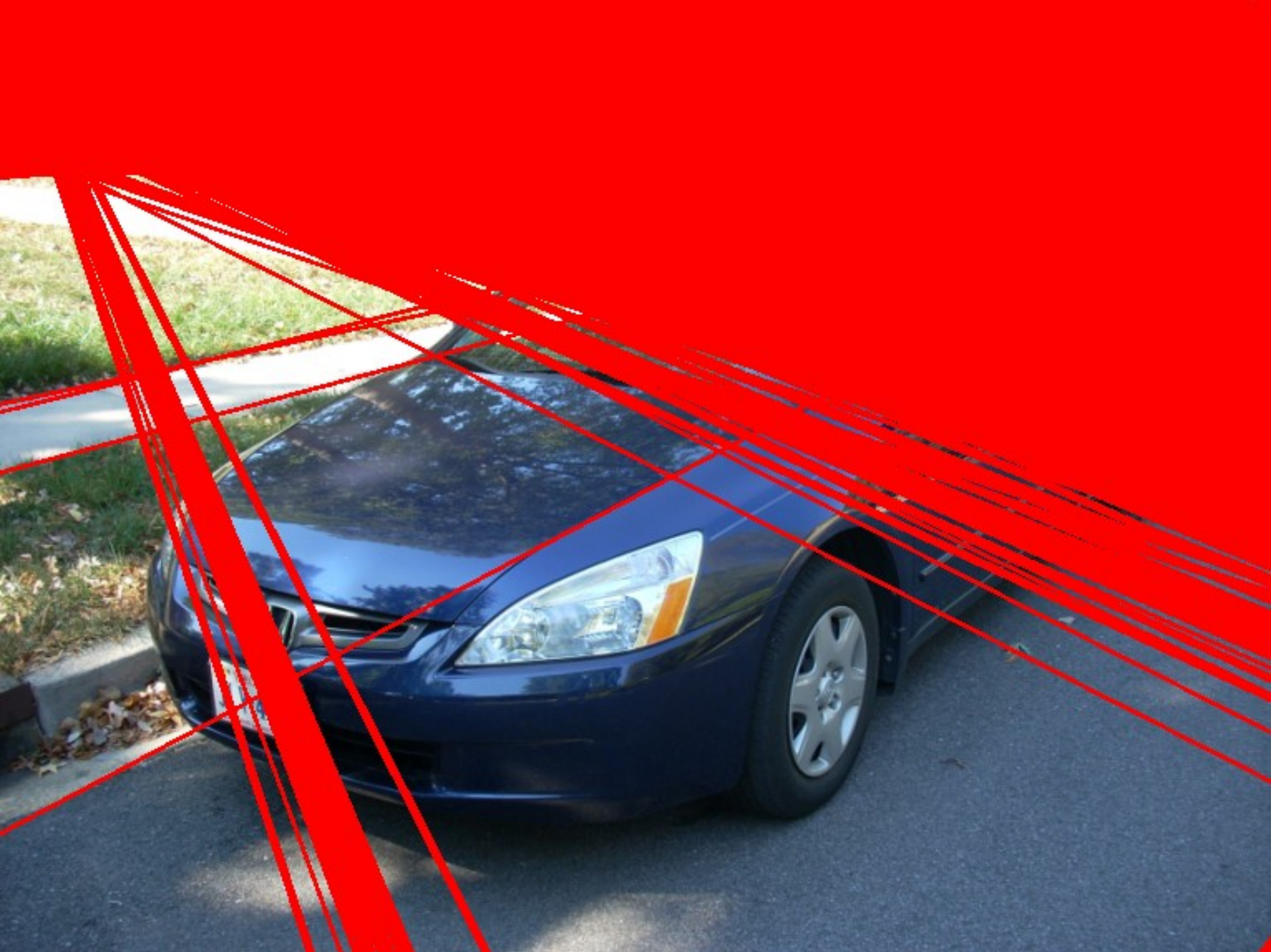


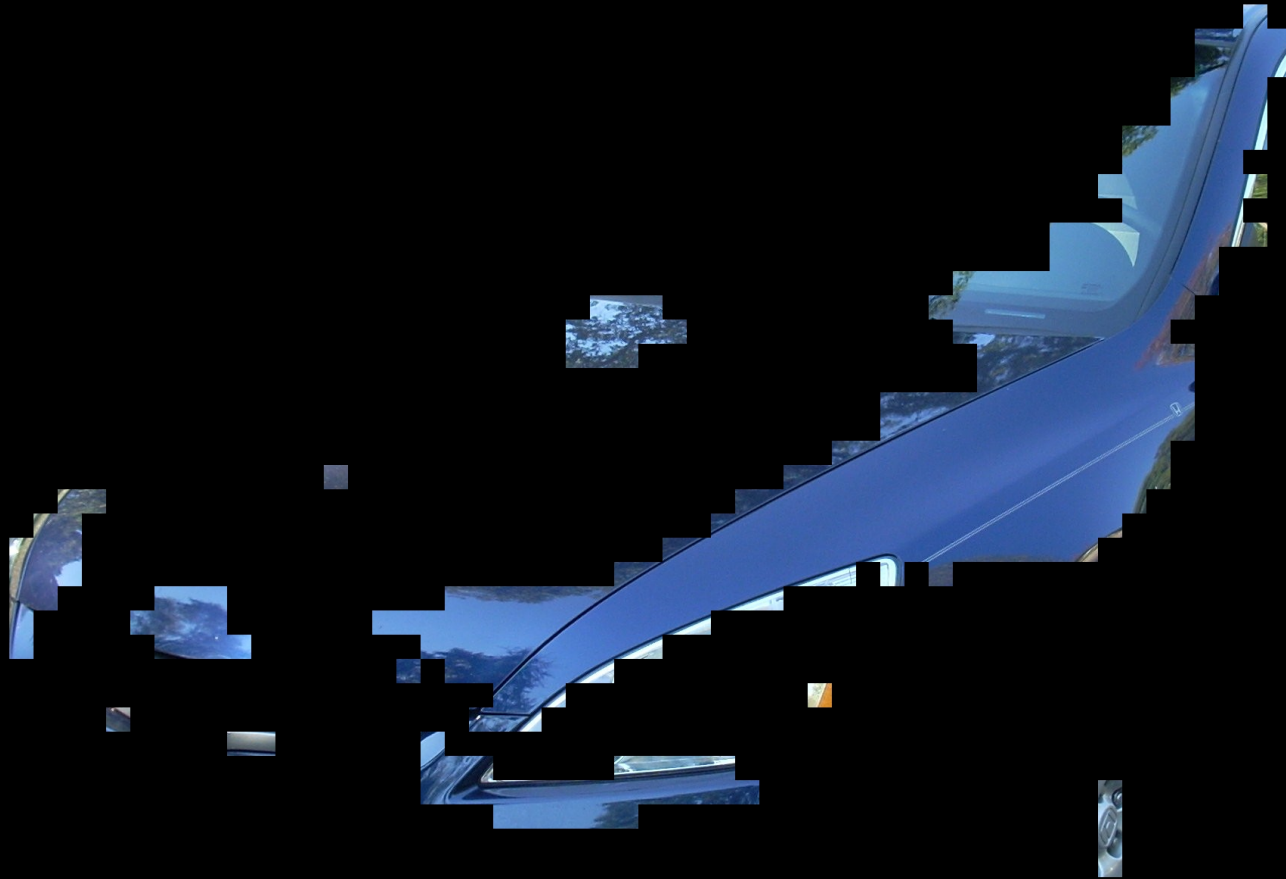






THE VIRGINIA  
JLV-4832  
OFFICIAL VEHICLE REGISTRATION





## *The Plan*<sup>™</sup> :

- Finish object isolation
  - Image warping, realignment
- Implement feature identification
- Expand testing database
- Connect to streaming input source

