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Identification of Gender from Gait

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Gait Analysis



- Human Identification- biometric
- No markers
- Security Applications
- Problem: how can we classify gender?
 - Current methods (side view) do not work

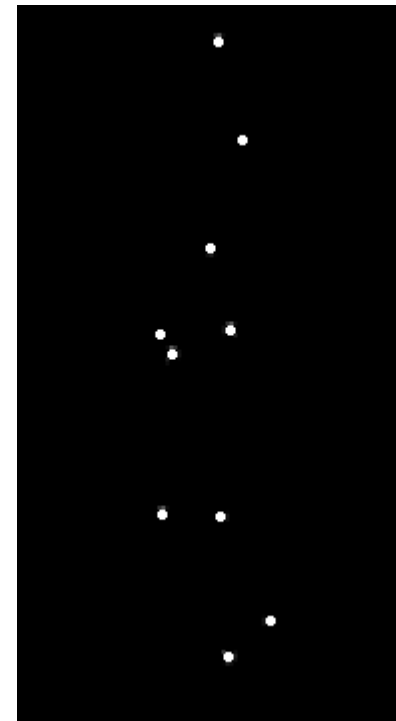




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- Lateral hip motion vs. lateral shoulder motion.
- Humans can determine the gender of a walker from a point light display
 - 63% recognition rate from side view
 - 79% recognition rate from front view



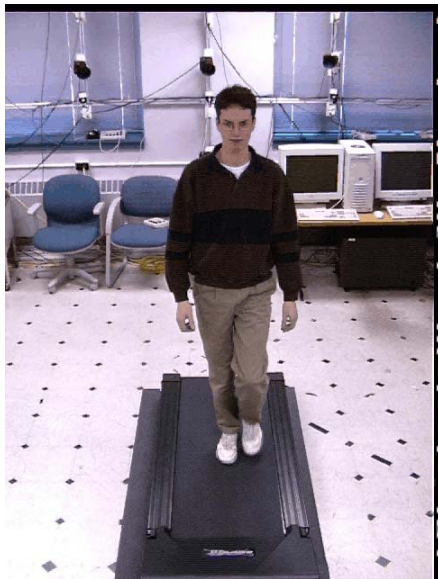


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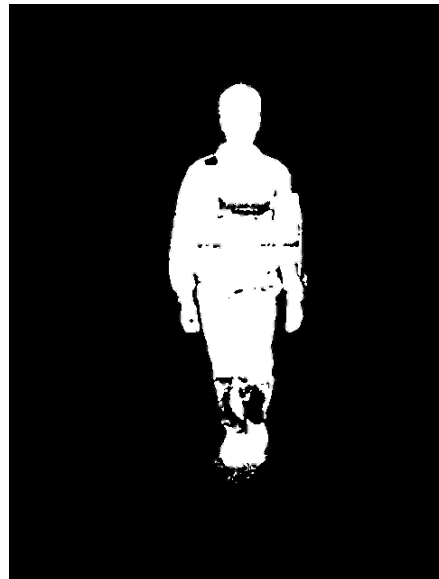
Gender Classification



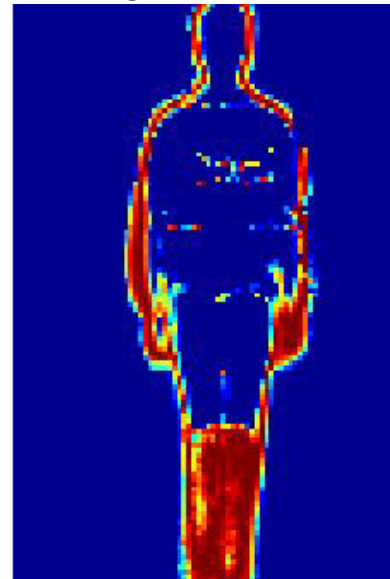
1. Video feed



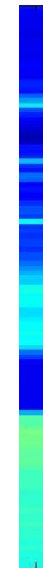
2. Background Subtraction



3. Variance Image



4. Variance Vector

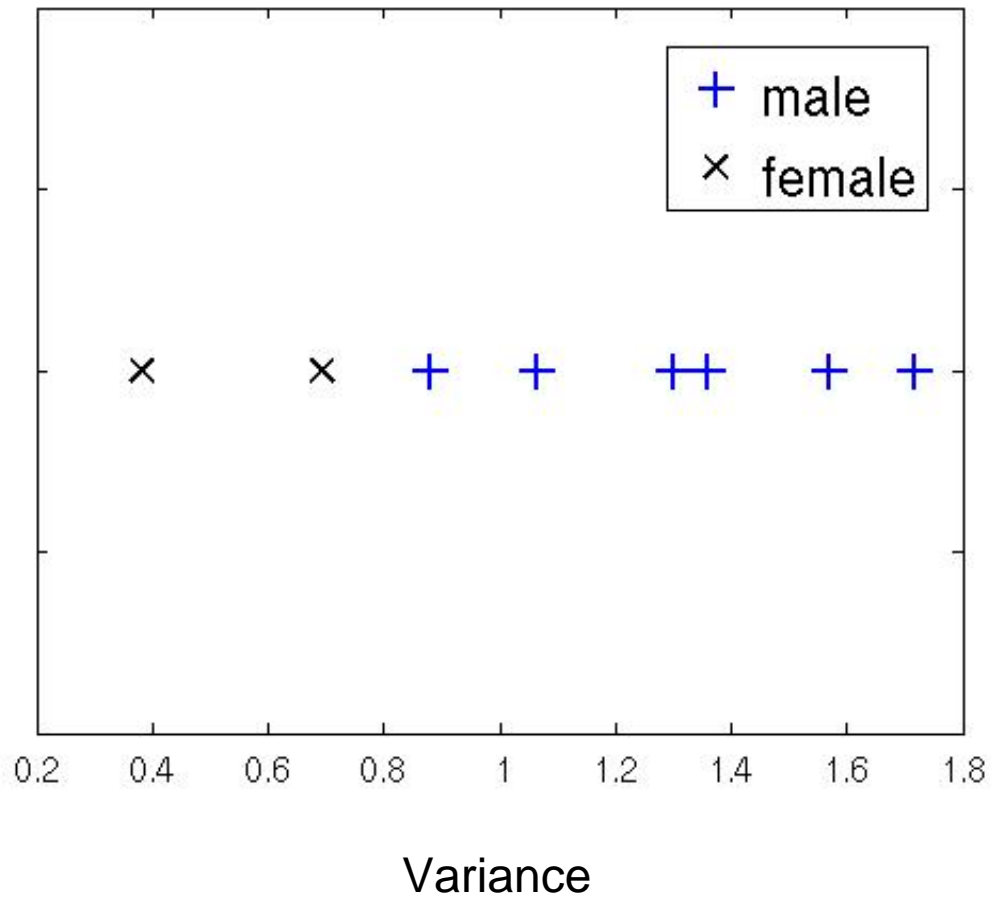
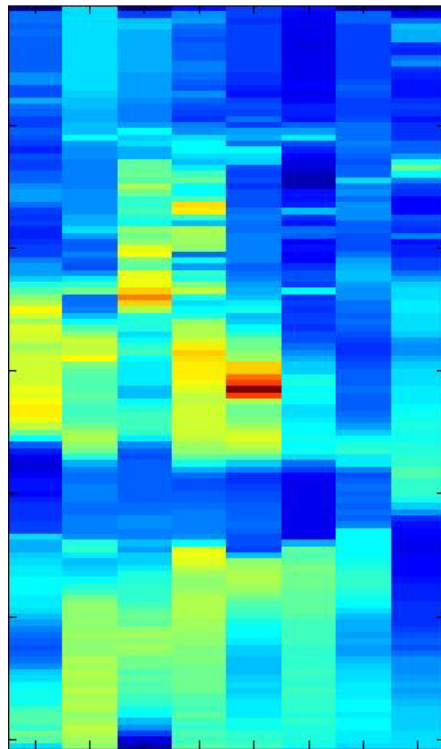


Variance
1.301



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Results



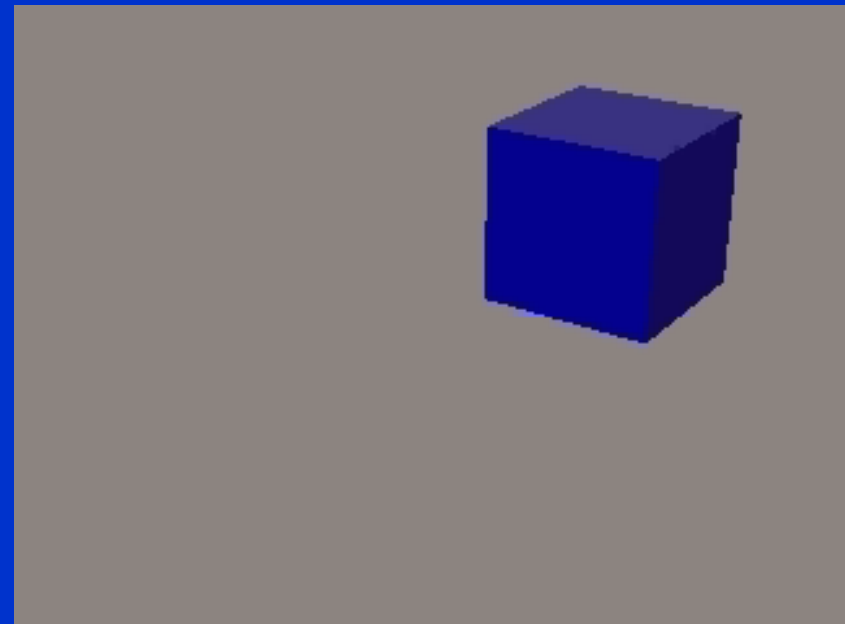


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Height-Estimation



- Current algorithm have not been ground truthed yet.
- Use Poser 7 to establish ground truth.





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Acknowledgments



- Aswin C. Sankaranarayanan
- Ashok Veeraraghavan
- Prof. Rama Chellappa

Questions?