
Applications of Computer Vision in Textiles

Dr. Samrat Mukhopadhyay

Robin Malhotra(2012TT10951), Rahul Sharma(2012TT10946) *Indian Institute of Technology, Delhi*

February 27,2015

With the advent of computers and automation practices, Computer Vision has found use in various applications- from looking for cracks in building foundations to observing plant growth in green-houses. In this Mini Project (under the able guidance of Prof. Samrat Mukhopadhyay), we will explore the possibilities of using this technology for Quality assurance in the textile industry.

1 Current Industry State

While the current industry has attempted to use Computer Vision and Image Processing for Quality Assurance, attempts have often been expensive and cumbersome. Take the example of **AVT Inc, Israel** that sells high quality instruments that use spectral imaging techniques to look for defects in fabrics. While these techniques may be useful and necessary in fabrics for aeronautical and structural purposes, this appears to be plain and simple overkill for garment fabrics. Also, research in this field has more or less remained stagnant after 2006, leaving the algorithms that run these processes fairly inefficient.

1.1 Subsection 1

- First item in a list
- Second item in a list
- Third item in a list

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Subsection 2

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Table 1: *Random table*

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Richard	Miles	2

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Section 2

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First This is the first item

Last This is the last item

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References

[Figueredo and Wolf, 2009] Figueredo, A. J. and Wolf, P. S. A. (2009). Assortative pairing and life history strategy - a cross-cultural study. *Human Nature*, 20:317–330.