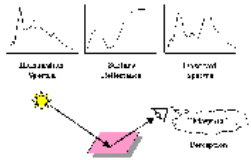

Computational Vision Lab

Web Site

Computational Vision deals with enabling computers to use visual information. Our primary focus in the Vision Lab at SFU is in understanding colour: How are colours perceived? How can colours be reproduced accurately on different media? In what ways does colour help in understanding images?

You may have experienced untrue colour while using home video cameras or been frustrated because your colour printer does not give you the same nice colours you previewed on your LCD screen. Often poor colour rendition results more from our limited understanding of colour perception than it does from limitations of our colour producing devices.

For us to build machines that reproduce colours accurately or to make effective use of colour in robotics, we need to understand human colour perception. The last decade has produced many interesting new computational theories of colour coming from both computer science and psychology.

Members of the Computational Vision Lab conduct research into machine vision and image processing, with emphasis on computational models of colour vision.

Research Areas:

- Colour Constancy Algorithms
- Object Recognition Using Colour Indexing
- Sensor Sharpening
- Image Enhancement and Dynamic Range Compression

Our lab has affiliations and funding support from: Natural Science and Engineering Research Council, Samsung Incorporated, B.C. Advanced System Institute and Creo Inc.