Video voting

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Github page for source code

About the technology and method behind this

<html> <iframe src="https://player.vimeo.com/video/361501208" width="640" height="360" frameborder="0" allow="autoplay; fullscreen" allowfullscreen></iframe> YUV decomposition to detect color cards. from Anthony Cate on Vimeo. </html>

Illustration of YUV decomposition of footage of class voting about motion they perceive in a spaghetti western video.

The original footage of the class holding up their cards has been blurred to obscure students' identities. Only the luminance (black-white) channel has been blurred, which leaves the colors from the cards with a sharp-edged appearance. The three panels at the right show the three YUV channels into which the footage can be split for further analysis.

The middle-right panel (the U plane) is analyzed to count the number of yellow and blue cards being held up during each frame of video of the class. These counts are used to draw the bar graph at the upper left.

On top of Ennio Morricone's soundtrack, you can hear me encouraging the students to vote with their cards by urging, "No right or wrong answers!"