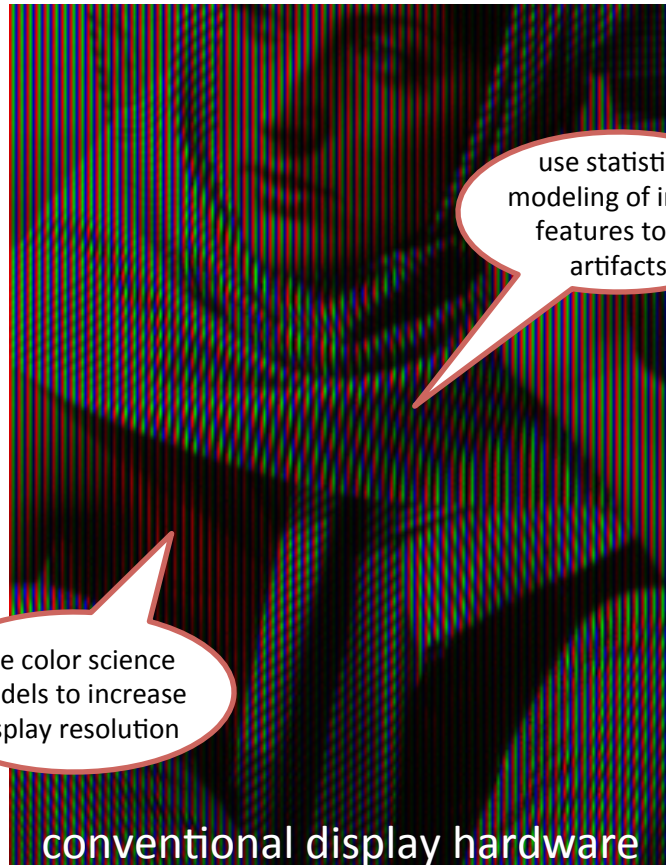


# Dr. Keigo Hirakawa <http://academic.udayton.edu/hirakawa>

## Intelligent Signal Systems Laboratory

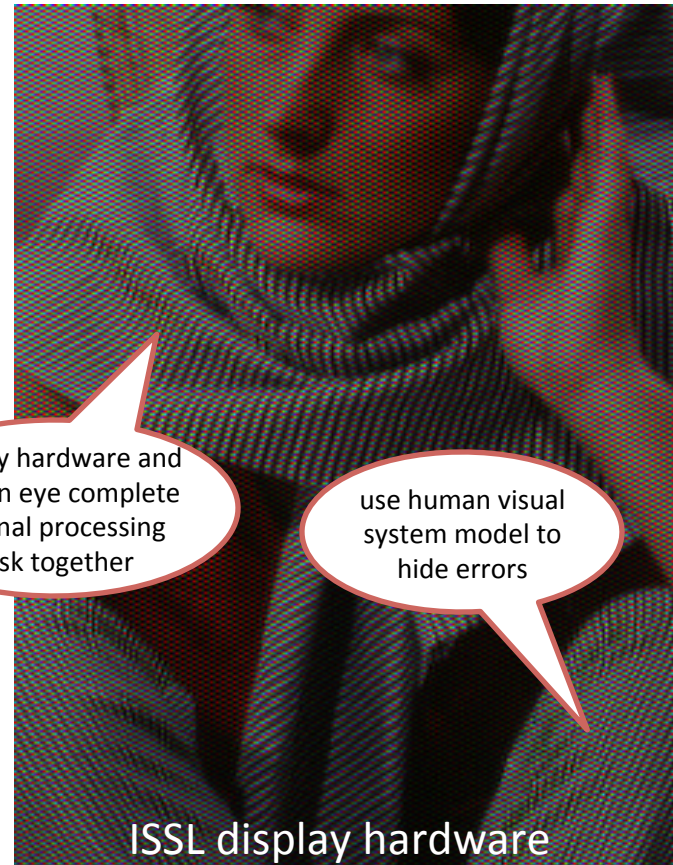
Research at ISSL is aimed at understanding the increasingly large role that signal systems play in the real-world. We connect the applied design efforts with the first principle ideas of mathematics and statistics to enable new capabilities in image processing, computer vision, biomedical imaging, and sensors.



use color science models to increase display resolution

use statistical modeling of image features to fix artifacts

conventional display hardware



display hardware and human eye complete a signal processing task together

use human visual system model to hide errors

ISSL display hardware

Example: LCD display design. Same number of pixels, but increased spatial and color resolution.