Dear Faculty, IGERT Fellows, IGERT Associates and Students, You are cordially invited to attend a Seminar presented by Ben Sanders. Please plan to attend.

Ben Sanders

IGERT Fellow Computer Science and Engineering

Date: Friday, October 4, 2013 Location: Bourns A265 Time: 11:00am

Revolutionizing the Way We See in the Brain

Abstract:

We present a framework for single image super-resolution. This method contains five sub-components which collectively address noise removal, surface interpolation, and edge-directed sharpening. The components within this framework run in linear time with respect to their output.

The contributions of this method are twofold:

(i) the framework provides polynomial time complexity algorithms for super-resolution in blind contexts, and (ii) the method yields constant error with respect to the desired scale factor of the super-resolution output.

Our method produces results with sharper edges than normally seen in current super-resolution and interpolation methods. Experimentation shows that components within our framework provide high-quality, constant error super-resolution output from low-resolution input regardless of the output scale.

