

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

Albert Cruz

IGERT Fellow
Electrical Engineering

Date: Friday, October 11, 2013

Location: Bourns A265

Time: 11:00am

Facial emotion recognition with anisotropic inhibited gabor energy histograms

Abstract:

State-of-the-art approaches have yet to deliver a feature representation for facial emotion recognition that can be applied to non-trivial unconstrained, continuous video data sets. Initially, research advanced with the use of Gabor energy filters. However, in recent work more attention has been given to other features. Gabor energy filters lack generalization needed in unconstrained situations. Additionally, they result in an undesirably high feature vector dimensionality. Nontrivial data sets have millions of samples; feature vectors must be as low dimensional as possible. We propose a novel texture feature based on Gabor energy filters that offers generalization with a background texture suppression component and is as compact as possible due to a maximal response representation and local histograms. We improve performance on the non-trivial Audio/Visual Emotion Challenge 2012 grandchallenge data set.

