SEMINAR

Facial Recognition

Measuring the Attractiveness of Three-Dimensional Facial Models

Seminar Speaker- Dr. Marietta Cameron

Chair and Associate Professor of Computer Science, UNC Asheville

In the developing field of computational aesthetics, researchers investigate and develop algorithms that make aesthetic judgements in a manner similar to humans. The algorithms that measure attractiveness usually reference some set of "universal indicators of beauty" studied in numerous fields and through various methods. We incorporate the theory of "average is attractive" in our ongoing attempts to numerically measure attractiveness of three-dimensional face models. Specifically, we investigate if we can determine attractiveness using Blanz and Vetter's mathematical model of faces, which abstracts each face as a point in a multi-dimensional vector space with the origin as the average face. The axes of the facial point space are determined by a statistical analysis of a dataset containing approximately 200 faces.   In this presentation, we discuss the field of computational aesthetics, review attractiveness algorithms, we survey three-dimensional mathematical models, and we compare the results of the proximity algorithm to the human evaluations we received from our investigations.

Room 110 Nicks Hall
Wednesday, March 15th 11:30- 12:30

Hosted by the Student Association for Computing Machinery, the Dept of Computing the CaRDS Institute