The KW- IEEE Section, Signal Processing Chapter and
The Pattern Analysis and Machine Intelligence Group (PAMI),
Electrical and Computer Engineering Department
Present
Professor Bir Bhanu
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3D Human Ear Recognition

Abstract
Ear is new class of biometrics that has certain advantages over face and fingerprint which
are the two most common biometrics in both academic research and industrial
applications. An ear can be imaged in 3D and surface shape information related to its
anatomical structure can be obtained. This makes it possible to develop a robust 3D ear
biometrics. The talk will present complete human recognition systems based on 3D
ear biometrics. It will explore various aspects of 3D ear recognition: representation,
detection, recognition, indexing and performance prediction. The experimental results on
various large datasets will be presented to demonstrate the effectiveness of the
algorithms.

Biography
Dr. Bhanu is a Professor of EECS and Director of an interdisciplinary Center for
Research in Intelligent Systems (CRIS) at the University of California at Riverside
(UCR). He has been the principal investigator of various programs from NSF, DARPA,
NASA, AFOSR, ARO, and other agencies and industries in the areas of video networks,
video understanding, learning and vision, image understanding, pattern recognition, target
recognition, biometrics, navigation, image databases, and machine vision applications.
He is the coauthor of books on Computational Learning for Adaptive Computer Vision,
Evolutionary Synthesis of Pattern Recognition Systems, Computational Algorithms for
Fingerprint Recognition, Genetic Learning for Adaptive Image Segmentation, and
Qualitative Motion Understanding, and the co-editor of a book on Computer Vision
Beyond the Visible Spectrum. He holds 11 U.S. and international patents and over
250 reviewed technical publications in the areas of his interest. He has received
industrial, university and journal awards for research excellence, outstanding
contributions, and team efforts. He is a Fellow of AAAS, IEEE, IAPR, and SPIE.

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