Diagnostic aid system using soft-biometrics

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The development of tools to aid diagnosis has been an important element in recent years to enhance research between technology and medicine. This has greatly facilitated the work of medical doctors and has made it possible to find greater efficiency in the health services of any country. Among the different medical specialties existing, is the Neurology. In particular, there has been collaboration during several years with the doctors of the "Dr. Negrín" University Hospital in Gran Canaria (Spain), in order to develop a non-invasive tool to obtain information about patients and to observe the evolution of the disease in them. We have worked with patients with Alzheimer's to observe the characteristic variations in loss of emotions. This diagnosis is one of the elements that doctors usually observe and allows them to have an opinion about their evolution. Therefore, a tool has been developed that captures this information (level of emotions or aurosal) with a webcam and informs the doctor in real time about the state of the patient's emotion. This tool can be used with and without the presence of the doctor and helps to decongest the patient lists, obtaining information from each patient under the recording protocol proposed by the medical doctor.