A Fuzzy Approach to Support a Musculoskeletal Disorders Diagnosis

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Abstract

This work describe a fuzzy inference system to support a musculoskeletal disorders diagnosis. The musculoskeletal disorders refer to conditions that involve the nerves, tendons, muscles and supporting structures of the body. Nowadays it is observed a increasing in the number of occupational injuries and illness. The linguistic variables and rules of the system were associated to the disease symptoms and signals. To implement this system we incorporated the knowledge of a medical expert. We use some clinical cases to evaluate the performance of our fuzzy model. The fuzzy system used applies the Mamdani method [1]. The next step of our research is to fine tune our system based on the analysis of more input variables and to validate the model against a bigger population of patients with well-confirmed diagnostics.