Predicting Diabetic Foot Maturing Through Evolutionary Computation

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Abstract It is a twenty-first-century disease, its numbers are still growing exponentially. This brings one to the subject of this work, the *Maturing of Diabetic Foot* which, like diabetes, rises to values never seen before. It is envisaging the development of an *ImageJ* plug-into extract relevant feature from diabetic foot images and, in conjunction with the patient's clinical and lifelong data, a computational system to

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predict and evaluate its severity. The applied problem-solving method is based on a symbolic/sub-symbolic line of logical formalisms that make complex systems easier to develop and analyze, where solutions to new problems are based on answers to previous ones, and itemized as a Case-Based Reasoning/Artificial Neural Network approach to computing.

Keywords Diabetic mellitus · Case-based reasoning · Artificial neural networks · ImageJ · Many-valued machines

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