

# FUZZY DECISION TREES APPLIED TO THE EARLY DIAGNOSIS OF RETINITIS PIGMENTOSA.

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**Abstract.** Retinitis pigmentosa is the name given to a diverse group of inherited eye disorders. Although family history and lost of peripheral vision are good indicators of the presence of problems, a better diagnosis can be made with an electroretinogram (ERG). But this is a complex test and might not be available to all patients, there the importance of obtaining other ways to early diagnose these diseases.

That's the goal of this work: find rules that help early diagnose Retinitis pigmentosa, applying Data mining methods of Automatic learning. Specially we applied some Decision tree based methods that when combined with Fuzzy logic produce more interpretable and precise models. We show the results obtained after applying the methods CART and SDT (Soft Decision Trees).

**Keywords.** fuzzy decision tree, approximate reasoning, automatic learning, data mining, retinitis pigmentosa