

**Project Title:**

Creating Data Models of Ready and Not-Ready Past Student Applicants as a First Step to Assessing a Current Student's Readiness for Medical School

**Project Abstract:**

Attempting to assess readiness for medical school among undergraduate student aspirants is difficult, since there are so many variables involved. Some of these variables include GPA (overall and BCPM), MCAT scores (on three dimensions), choice of rigorous and appropriate coursework, shadowing experience, clinical experience (volunteering and/or employment), and a proper temperament and passion for the profession. This study will use data mining software and fuzzy clustering of existing data available on past student applicants as an initial attempt to build models against which the data of current students may be compared, and therefore to eventually assess that student's readiness for medical school. These data will be applied to determine benchmarks for each academic year, so that a student's readiness can be assessed at certain critical junctures in the student's academic career. This project specifically will provide for the design, implementation, and population of a warehouse of data regarding past students, train the principal investigator to carry out the fuzzy clustering and data mining routines necessary to build the models, and facilitate the production of the models for further application in the assessment of current students' readiness for medical school.

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