The Use of Artificial Intelligence in College Admissions

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Every year around September 1st, high school seniors begin applying to colleges. The applicants upload high school transcripts, ACT/SAT scores, and letters of recommendation to their chosen colleges and university admissions websites. Unfortunately, there are considerably more applications than there is space in the freshman classes, and not enough admissions staff to review all the applications by hand. As a result, schools have started employing machine learning and Artificial Intelligence to reduce the workload.

Artificial Intelligence (AI) is already used to answer campus life and admissions process questions, detect plagiarism and check for spelling and grammatical errors within assignments. For example, Georgia State University uses a chatbot named Pounce to answer questions incoming freshmen might have. Pounce answered over 200,000 questions, improving the pre-college experience and resulting in fewer no-shows on the first day of class. As classes grow too large for instructors to manage, many schools use AI to grade student assignments giving teachers more time to concentrate on teaching. Currently, computers perform the first review of the applications and remove those that do not meet the minimum requirements, but can the use of technology in college admissions go further?

Some colleges analyze data from past classes to score admission applicants on the likelihood of actual enrollment, if financial aid is needed, and the probability of graduating. Along with demographics, some universities consider an applicant's interaction with the school's website to predict the potential for success.

Starting in 2013, the University of Texas at Austin Computer Science department used GRADE (GRaduate ADmissions Evaluator), a statistical machine learning application using past admissions into their Ph.D. program to estimate the quality of new applicants. Then inform the

admissions committee of the findings, making the review process more efficient. While at least one person reviews all applications, GRADE uses scoring to identify the weaker candidates who will probably be rejected and the strong candidates that will likely be admitted so the reviewers can concentrate on the borderline applicants in the middle. GRADE ranks the candidates in descending order of quality along with an explanation of each candidate's strong and weak attributes based on the program parameters as a starting point for the reviewer.

The most significant issue with adapting machine learning to score applicants based on historical precedence is that it perpetuates bias in giving preference to one group of people over another. Unfortunately, this will continue to marginalize the more under-represented groups like women and people who are Black and Latinx. In addition, the score would predispose reviewers to follow these recommendations before reading the application. While GRADE had limited use for admission into a Ph.D. program, the adaptation of this application for all levels of higher education is possible, limiting acceptance to only those who have the correct "pedigree." In 2020, the University of Texas abandoned GRADE due to concerns about diversity, equity, and fairness in the admissions process.

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