

Human AI Interaction
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If the future of college admissions is AI, where does that leave admissions counselors?

For many students around the world, college is an investment in their future. After years of putting in effort to get good grades, doing extra-curricular activities and volunteering, they then spend months perfecting their personal essays to ensure that they're putting their best foot forward in their college applications. According to a study by the Pew Research Center, students typically apply to around 7 schools. This means that over 10 million applications are sent out to universities each year [1]. So as automation becomes more ubiquitous, it comes as no surprise that it would enter the world of college admissions. Currently, there are many universities using AI to decrease the reviewer bias involved in the admissions process, to increase the amount of applicants and to increase the amount of students who enroll. But a question that many have is, if the future of college admissions involves AI, where does that leave admissions officers? I argue that AI will never replace admissions officers, but the tools can be used to complement and help them.

Current State of AI in College Admissions

Decreasing Bias

Many proponents of artificial intelligence argue that it could decrease the bias involved in college admissions. The U.S. College admissions process is by nature, subjective. The application contains both qualitative and quantitative aspects. Quantitative aspects include transcripts, GPA, and standardized test scores. Qualitative aspects include essays and personal statements in which students give insight into their interests and personal reasons for applying to a program or school. According to a 2018 research study looking into the holistic review process, there are many possible areas of bias when an admissions counselor is determining whether a student is a good fit for a university [2]. These may include the halo effect, in which a reviewer may first come

across a very good or bad piece of information about the applicant, and this affects how the reviewer views the rest of the application. For instance, if the student's SAT score was extremely good and it was the first piece of information the reviewer saw, they might look more favorably on the student throughout the rest of the application, regardless of what it contains [2]. Other types of bias may be racial bias, gender bias, and simply reviewer exhaustion, in which a reviewer is too exhausted to properly look over one's application, possibly resulting in a wrong admissions decision [3]. Companies such as Kira Talent and Salesforce have been working to reduce such bias in the process by creating AI systems that flag potential bias when a reviewer is looking at applications. For instance, suppose a reviewer went to the same school as the applicant, softwares such as the one produced by Salesforce and Kira Talent would flag a potential bias and bring it to the attention of the reviewer [4]. The system does not force the reviewer to avoid the bias, but simply flags it, allowing the reviewer to make their own decision.

Increasing applicants

But artificial intelligence tools are not only being used to mitigate bias, but are also being used to increase the amount of applicants applying to a university. Tools such as Conversica are being used to strategically engage with prospective students who are most likely to apply and enroll if accepted. Conversica is an AI Assistant that sends out emails to prospective students to increase their engagement, and interest in a school [5]. The idea behind this is that the more a student is engaged with the school, the more interested they become, and then the more likely they are to apply.

Salesforce Einstein Analytics is also used to create more interest in a school or program. Taylor University, a liberal arts college in Indiana, revamped its recruitment process using the data from Salesforce Einstein Analytics. Originally they had a geographical approach in which counselors would visit schools in a specific geographic area and be the point person for prospective students from that area. After collecting multiple types of information about their students through Salesforce, the university then switched to an academic approach in which they assign academic subjects to counselors [6]. Counselors would become experts in those areas and then proceed to "sell their program to students" [7]. In 2018, Taylor University had its largest freshmen class and

this is in large part due to the change in recruitment strategy [6]. So it seems that artificial intelligence has found its footing in possibly decreasing bias in the reading process and increasing engagement between admissions officers and students. But, is there more that it can do?

Predicting Success

Predicting the success of a student in higher level education has been of fascination for many years. A 1974 research study by Warren Willingham explored the different factors involved in predicting success of students in graduate school. At the end of the paper the author states, “In summary, the available objective evidence suggests that the accuracy of predicting which students will succeed in a particular graduate school is often no better than modest, especially if such predictions are based only upon a test or a grade record” [8]. Although this study is from many years ago, it contains some similarities to research being done today to predict the future success of a person. COMPAS is a risk-assessment algorithm used to predict a person’s likelihood of committing a crime. In a 2018 study investigating this algorithm, researchers concluded that COMPAS was no better at predicting a person’s likelihood of re-offending than a human. In the study, 400 participants, with no criminal justice background, were given information about a defendant and were asked to predict whether the defendant would offend in the next two years. The algorithm had an accuracy of 65%, while the average accuracy of participants as a whole was 67% [9]. Similar to the results of the research study by Willingham, the results of this study displayed that predicting the outcome of a person in a situation with multiple factors and different contexts is difficult and hard to do for humans, let alone an algorithm. In the world of college admissions, which is by nature an ambiguous process, data and results such as the ones above play a role in determining whether it makes sense for algorithms today to predict the future success of a student at a university.

The current state of AI in college admissions reveals that though much work has been done, artificial intelligence is far from replacing an admissions counselor. That being said, I think it is important to know how the people who are affected by such tools, feel about it. So, how do

admissions counselors, who use the tools, and students, who are at the receiving end of the tool, feel about this? In order to find this out I talked to three admissions counselors and 5 current college students to find out how they feel about the use of artificial intelligence in college admissions.

Admissions committees already take precautions to mitigate bias

There were many interesting insights I learned from my conversations with the admissions officers. First being that many admissions committees actively try to mitigate bias without external tools. Many college admissions committees have people of various backgrounds and experiences in order to provide multiple perspectives when reviewing an applicant. Some universities also engage in a multi-review process so that multiple counselors read an application to decide whether a student should be accepted. Both these methods to mitigate bias are not fool-proof, but they should be considered well before implementing any AI tool.

Admissions counselors take pride in the personal nature of the admissions process

Another insight I gained from my conversations were that admissions counselors take pride in the fact that the admissions process is personal. All three of the admissions counselors I spoke with believed that completely replacing a human in the process was not a good idea because the process would become less personal. One admissions officer said, “I would say, you would find hesitancy to replace human review of application materials with AI in a highly selective environment because of concerns that contextual information may not be identified in as individualized of a way”. Another admissions officer expressed concern that by having AI tools filter out applicants, it might actually increase the disparity between underprivileged and privileged candidates. Admissions officers take pride in their work and believe they’re able to identify those students who may not look great on paper but have great potential. Whether this aspect of the process can be considered a bias or not is up for debate. But, it is no doubt that many students who did not have the best of grades, but were still accepted to a university, did well in the end. The officers that I spoke to were concerned that such students would be weeded out quickly if an AI took over.

But the admissions counselors didn't have only bad things to say about artificial intelligence in the admissions process. They also had some interesting ideas about how AI tools could aid the process.

Admissions counselors aren't anti-AI

The most surprising insight I gained from my conversations were that admissions counselors have some pretty cool ideas about how to use AI in college admissions. One admissions officer believed that AI tools could be used to help identify applicants that may need a second review. They mentioned that although they try their best to thoroughly read through one's application to determine whether or not the student would be a good fit for the university, sometimes students do fall through the cracks. What if the AI tool could find those students and bring the reviewer's attention to them? Another admissions officer expressed interest in using AI tools to find students who were unaware of the university or who didn't think they should apply but would actually be a good fit for the university. They believed that artificial intelligence could be used to attract students who may not otherwise apply to the university.

My conversation with admissions officers revealed how important it was for them to retain a sense of personal connection in the admissions process. One admissions officer also made an interesting observation about how students would think about their application if they were to find out an AI system was involved in the decision making process. They said, "They might be more skeptical of the process and I'd imagine it would change the way they answer questions and how they actively search for a school". This comment made me think about how students, the people most impacted by the admissions process, think about AI tools in admissions.

What do students think?

I asked five students this question : "How would you feel about an AI tool making the decision of whether you got into a college?" The responses varied from 'doesn't that already happen?' to 'not surprised' to 'I'd be so angry'. One student who expressed that he wouldn't be surprised

remarked, “School is a business and if they can automate anything they will”. A student who revealed she would be angered by it said, “The whole point of writing an application is to have a human read it. Otherwise you’d just send in your SAT scores and GPA and that would be it”. From these responses, and others that I gathered, it seemed that students generally wouldn’t like the idea of an AI tool making the final decision of whether or not they were accepted. This response seems to be supported by research done on understanding how people perceive algorithmic decisions. In a 2018 research study conducted by Min Kyung Lee, people’s perceptions regarding algorithmic and human decisions were measured against each other. Participants were presented with two tasks, one which required mechanical skills and one which required human skills. Researchers then manipulated each task with a decision, algorithmic or human, and presented it to the participants. For instance, in one scenario a participant was presented with the idea that a decision about a mechanical task was made by an algorithm while in a different scenario a participant was presented with the idea that a decision about a human task was made by an algorithm. The study found that when an algorithm made a decision on a mechanical task, people didn’t mind. But when an algorithm made a decision on a human task, people were less trusting of the decision [10]. So it seems that it would be normal that students wouldn’t really trust such decision. But would they actually approach the application differently if they knew an AI was going to make the decision? One student’s answer shed light on this, and perhaps raised more interesting question.

The student revealed concerns about transparency. She stated that if it was the case that an AI tool made the decision, she would want to know before submitting her application. Her response raised possible ethical considerations schools may need to make regarding the involvement of AI in admissions. Should students know who or what is reading their application? For many schools, the ambiguity in the admissions process is purposeful so that prospective students do not try to fit themselves into a mold to get into a specific college. But, if students were aware that an AI system may be deciding whether or not they are accepted, they may approach the entire application differently. Whether or not this is a good idea, I will leave up to the reader to decide.

With the rise of AI, it seems inevitable that artificial intelligence will become a part of the college admissions process. Though it will be many years before an AI system will completely overtake an admissions counselor, there is quite a high chance that within the next few years, softwares such as Kira Talent and Salesforce Einstein Analytics will become part of an admissions counselor's tool kit. Given this information, a concern that rises is , how much do counselors think about algorithmic bias? If tools such as Salesforce Einstein Analytics and Kira Talent become staples in the admissions process, it is important for counselors to understand the AI tool's limitations. There is much research in psychology regarding 'automation bias' which refers to the idea that people believe if something is automated, it is more accurate [11]. In the world of admissions, it is quite likely that if AI tools were to be used, admissions officers wouldn't necessarily question them. It is possible that due to societal automation bias, admissions officers wouldn't catch biases that the AI tool might include. I would urge universities that do believe in using AI tools in the admissions process, to inform the users regarding its limitations. College admissions is personal and requires a lot of attention. If we can make tools to aid the process rather than replace it, I think this would provide admissions officers the support they need.

Citations

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