Ethical Analysis

My project is to apply machine learning algorithms to the area of college admissions. Specifically, the completed software will be used by the admission department of Westmont College as a tool to help determine which applicants to admit into the college, and which not to offer admission. The software should make this determination based not only on which students have favorable qualities (i.e. high GPA, strong references, high SAT/ACT scores), but also on which such students are most likely to matriculate once offered admission. Ideally, the software will replace the work of consultants who are hired to help make this determination, thus streamlining the process for the admission staff and saving the college money, while simultaneously increasing the percentage of those offered admission who accept and matriculate. This project raises a number of potential ethical issues, which deserve careful consideration.

One such issue is that incorporating the proposed software into the decision making process of the admissions office in the manner described makes the decision too impersonal, or that it removes or diminishes the human element in the decision. A person might argue that it is in some way unethical to allow the decision of whether a particular applicant should be admitted to the school to be made by a machine – especially in light of the fact that the applicant’s hopes and dreams may be fully set on obtaining admission to the college. It is worth noting that the person making this argument seems to have an underlying assumption that a computer is in some way less qualified to make this decision than a human is. The person in question essentially argues that it is unfair to the applicant to allow a decision of such importance to be made by a computer. Admittedly, human decision-making can include a degree of subjectivity that is generally absent in computers, but one might ask on what basis a subjective decision is considered better than a more objective one. Faced with this question, the imaginary person bringing up this objection would doubtless deny that this is his or her claim, which brings the argument back to the person’s underlying assumption that a human is a more qualified decision maker than a computer (at least in this area).

Before addressing this objection further, consider the closely related objection that use of this software will cause the admissions staff to be less invested in their jobs because of decreased agency. The two objections both see the use of this software in place of the consultants who currently do the same work as negative but from opposite sides of the process. The one objects that this is unfair to the students, those directly affected by the decision being made; the other complains that this increases the apathy of admissions workers, those on the other side of the decision. Both objections fail to understand the software as part of a larger system, which includes the admissions staff, the applicants, the data that is gathered on the applicants and other factors. Even with the addition of the proposed software into the decision making process, the admissions staff are still the ones making the decision of who to admit and who not, rather than the software. The real question is how the staff will choose to use the software in making this decision. In designing this software, I intend and believe that the admissions staff will use the software in a way that leverages and facilitates their own knowledge and ability in the area of admissions, rather than a way that disregards it. A student who is particularly well suited for Westmont
should (and will, I believe) still be admitted, even if this fit is not adequately represented in the data available to the software and is thus rejected by the software.

Another relevant (and related) ethical objection to the project is that it degrades the worth of those who apply because it sees them only in terms of quantifiable data; rather than viewing them as people, it turns them into a collection of numeric attributes. One might argue that an applicant can never be represented fully and accurately by quantitative attributes, which necessarily form the basis for the software to make its determinations. Again, the answer to this objection comes in understanding the software as part of a larger system. The information gathered about the applicants is also a part of this system, and in fact, it remains a part of the system even if the software is not included. Addition of the software into the system does not change the information gathered about the applicants, so there is no reason to think that the use of the software will fundamentally change the way the applicants are viewed. If the objection is simply that the software does not adequately account for qualitative attributes, we again note that it is ultimately the admissions staff who make the decision of whether or not to admit a student, and it is their duty and responsibility to take into account those attributes that are not accounted for by the software as they make the final decision.

Another ethical issue that the project raises has to do specifically with the idea of only admitting those people who will with high probability respond by matriculating. The details of this proposed feature are not firm, but a potential consequence of this is that applicants who are “deserving” of admission (based on having favorable attributes) will not be offered admission because they are less likely to accept their admission than other “less deserving” students. For instance, an applicant who would, in the current system, certainly be admitted, but who will only respond favorably to this offer with 30% probability, might not receive admission in the new system, while a student who is less likely to receive admission currently might be accepted because they will respond favorably with 70% probability. The new system would thus, it could be argued, undermine free will because the first student is not given a choice based on the software’s prediction of what his or her choice will be, but this prediction is not absolute. The underlying assumption is that the college is in some sense obligated to offer admission to strong students, and that it is unfair (unethical) for them to take into account how likely the student is to come. On the contrary, it could easily be argued that it is the college’s prerogative, as a private institution, to take into account whatever factors they consider important, although most would consider discriminatory factors to be a clear exception to this argument. It is unclear in what way this particular factor would constitute legitimate discrimination, however. Furthermore, considering the applicants and the data collected about them as parts of a larger system, one could argue that the applicant’s likelihood of matriculating once offered admission to some extent indicates how well the student “fits” with the college. Few would argue that the college is wrong to seek students who “fit” well with their school.

While the project does raise a number of ethical issues, by viewing the software as part of a larger system comprised of admissions staff, applicants, data, etc., these concerns are largely addressed, and do not constitute enough of a problem as to make the continued development of this project unethical.