Score for Kory, Jacqueline

Intellectual Merit Criterion

Overall Assessment of Intellectual Merit

Excellent

Explanation to Applicant

I am incredibly impressed with Jacqueline's academic merit. She is a student who will seemingly make a model graduate student. She impressively completely an interesting BA thesis on biologically inspired predator-prey styles, which will complement her computer science studies nicely. I thoroughly enjoyed reading her personal statement, and appreciated her explanation of how she will be lost initially, and then overcome her adversity. And she has proven that within her document here. Looking at her transcript, she has only two B+'s among a sea of an otherwise straight A transcript. I noticed that one of these B+'s was in Statistics and Experimental Design. However, when reading her research plan, it is by far the most thought out and well design research plan that I have read thus far, and an extremely interesting and valuable topic as well. She is currently working full time in a research environment. I expect that she understand what she needs to do to succeed in a PhD program.

Broader Impacts Criterion

Overall Assessment of Broader Impacts

Excellent

Explanation to Applicant

Not only is are her academic qualifications excellent, but her broader impacts are also extremely well rounded. Her proposed research project should have positive ramifications on education as a whole, specifically targeting those populations who are less represented in computer science and using HCI technologies (such as eye-trackers and other sensors) to measure engagement and help identify causes for low participation.

Additionally, on a personal level, Jaqueline is a role-model student both academically and socially. She spends a lot of her time in outreach, including working as a student advisor for the robot competition in her senior year while finishing her thesis and working in a research lab.

Score for Kory, Jacqueline

Intellectual Merit Criterion

Overall Assessment of Intellectual Merit

Excellent

Explanation to Applicant

The candidate's application an reference letters speak to the candidate's intellectual and leadership capabilities. Her reference letters describe her as a person who can do it all: communicate exceptionally well in written and oral format, be a leader as well as an independent thinker, and a rising star in her research area. She has experience working as a research assistant in a lab at University of Memphis, at Vassar, and at NASA. Her research plan is exceptionally well thought out, with much attention to detail. It is on par with something written by an advanced graduate student or postdoc.

Broader Impacts Criterion

Overall Assessment of Broader Impacts

Excellent

Explanation to Applicant

The candidate has demonstrated a commitment to broader impacts. She was a math and CS tutor in high school and college, and worked with an academic success program for student athletes at Vassar. She also mentored a robotics team.
She has worked with research groups internationally and in other disciplines. In short, she has shown an ability to work with people from a variety of backgrounds (both culturally and academically).
She has helped disseminate research findings through her work writing a campus research newsletter.
Her reference writers unanimously describe her as a role model in her department and to younger women in computing, and she has been an active participant at the Grace Hopper Celebration of women in computing multiple times.

Score for Kory, Jacqueline

Intellectual Merit Criterion

Overall Assessment of Intellectual Merit

Excellent

Explanation to Applicant

Applicant has one paper presented at student forum at NASA where the student interned on multiple occasions. The applicant has also participated in her university's student research forum, a good indication that she understands the importance of letting others know about the research you are doing as this is a critical scholarly activity in graduate school and beyond. This speaks to the applicant's potential to communicate research findings, especially since she is a senior who will be attending graduate school in the fall of 2012.
The applicant has been successful at interning twice at NASA, resulting in research with autonomous vehicles. As an industry researcher, it says a lot about a student to be asked to return for another internship.
Moreover, the applicant has demonstrated strong leaderships skills as evident in her leading the Engineering Boot Camp at NASA Goddard Space Flight Center, where she managed 60 students to assemble a team of autonomous robots for 3D terrain mapping. As part of this effort, she collaborated with people in Brazil and faculty at the University of Maryland which addresses her ability to work well with others.
Lastly, for an incoming 1st year graduate student, her research proposal is well-defined, outlining both the significance of the problem and a clear understanding of assessment measures and anticipated outcomes.

Broader Impacts Criterion

Overall Assessment of Broader Impacts

Poor

Explanation to Applicant

The only issue I have is that the applicant mentions that one of the benefits of this research is to improve STEM learning. However, the research proposal does not address how this work will be intentionally tied to STEM learning (e.g. students in a biology course as potential subjects for a study). I also do not see any indication of commitment to broader impacts in the research.