

Dear University of New Orleans Women's Center,

It is my pleasure and honor to write on behalf of Brittany Bergeron in support of her receiving the UNO Scholarship for Women in Computer Science. I have worked with Brittany in two capacities: professor and research adviser. In both domains, Brittany has never failed to astound me with her creativity, work ethic, and facility for programming, software methodology, problem solving, and design. I'll begin by describing her numerous accomplishments in class, and then describe my experience working with her as a young researcher.

In class, Brittany remains one of the top students I've ever had the pleasure of working with; I would easily place her in the top one percent of all of my students, both past and present. She excels not only through sheer brilliance of mind, but through natural curiosity and having a touch of a competitive spirit as well. The class that I taught her in, CSCI 1583, had both a lecture component and lab component. The structure of the lab component was inspired by the ACM International Collegiate Programming Contest, with a series of short programming challenges focusing on the material covered in the preceding week's lecture. Each weekly lab would introduce around eight or nine new programming challenges, and students would typically be asked to complete any four for full lab credit. Brittany consistently solved every single question, every single week, earning the title of having the highest completion rate out of everyone in all sections of the class, besting over one hundred other students in the process.

Though an incredibly impressive feat, Brittany's exemplary performance on her lab work only begins to touch on her brilliance as a student and young computer scientist. She scored over one hundred percent on every single in-class exam. Her participation and engagement in class was inspiring, consistently demonstrating mastery of the material, and an eagerness to clarify confusion both for herself and for any of her fellow classmates. Lastly, but perhaps most impressively, her homework assignments were works of art. It is my understanding that one of the primary motivating factors that inspired Brittany to enter the field of computer science was a love of video games; every substantive assignment that she submitted was a wonderful work of playable media. Though currently Brittany may be taking inspiration from games made by others, there is no doubt in my mind that if she maintains on her current path, her work will soon be inspiring future generations of game designers.

The work she submitted was considerably more complex and rich than the baseline requirements for each assignment. This gave her exposure to advanced course concepts before we had even officially covered them in lecture, and she even leveraged material that was beyond the scope of the class that she discovered and figured out entirely on her own. Though all of her work was incredible, two projects stand out particularly in my memory. One was a pet simulator, that, in addition to modeling the physical and emotional state of the pet, also required the player to "take care of" the pet owner as well, asking them to manage their own time and choose where to go to work and how to spend their hard earned money. In addition to this being a larger project than what most of her classmates submitted, Brittany managed to weave in some societal commentary about a work-a-day lifestyle that was at once intriguing and hilarious.

The second project was an epic that would make Joseph Campbell proud; a hero's journey inspired by such action adventures as *The Legend of Zelda*. Set in a universe entirely populated by articulate cats, Brittany created a virtual world with backstory, danger, laughter, and ample opportunities for heroism. She implemented an entire "Quest System" that keeps track of the player's progress, sent the player on missions that successfully evoked a sensation of making the (virtual) world a better place, and asked the player to solve a bevy of puzzles that hit the perfect sweet spot of not having solutions that were immediately obvious, but that, once solved, felt fair and apparent. And, upon completing the game, the player learns information that they are meant to take with them into a second playthrough, in a wonderful innovative homage to the original entry which inspired this work.

The amount of programming effort that went into creating this masterpiece was immense, and Brittany clearly demonstrated a natural expertise in the field of computer science through its development. In addition to being a fantastic programmer, however, Brittany also wrote copious english prose that were engaging, at times poignant, frequently hilarious, and always incredibly well written. She also used computer software to draw charming renditions of all of the characters that populated her world. Brittany is brimming with creativity and talent, which shone through in every aspect of this work. It was truly inspiring.

I promised that I would also discuss Brittany's performance as a research assistant. To no surprise, she has excelled in this capacity as well. More formally, she is a "Tolmas Scholar" which means that she is paid to work up to ten hours a week alongside a professor conducting research that she is interested in, and I'm pleased that our mutual interests in developing new technologies to advance the fields of video games and game design brought us the opportunity to continue working together once the class had ended.

Even before this research assistantship officially began, Brittany came to my office several times to discuss her own interests, learn about possibly directions her own research could go, and discover if there was anything she could do during the winter break to prepare for this work in the Spring. Though her enthusiasm was, as always, much appreciated, this enthusiasm directly translated into her reading an entire book on the theory and history on computational media and interactive storytelling (and was even able to apply some of what she learned from reading it into her aforementioned final homework assignment). And once the actual research assistantship began, her performance continued to astound. Regularly surpassing expectations in both design and development, Brittany brings a fresh perspective to my research that undoubtedly strengthens it.

This project is still ongoing, and much work remains to be done. Although her research assistantship officially ends in May, I sincerely hope that she decides to stay on the project through the summer and possibly beyond. Brittany is an incredibly hard worker, overflowing with talent and brilliance. She is an incredible computer scientist, programmer, game designer, developer, and student in general. I give her my highest, most enthusiastic recommendation for this scholarship opportunity; though she is still near the beginning of her computer science

career, there is no doubt in my mind that she will continue to astound. Receiving this scholarship, and the mentorship that accompanies it, will do a great job towards facilitating her own natural brilliance and work ethic.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ben Samuel'. The signature is fluid and cursive, with the first name 'Ben' and last name 'Samuel' clearly distinguishable.

Ben Samuel