



March 9, 2018

To Whom It May Concern:

Please accept this letter as a statement of support for Allison Ivey. Although Allison holds a previous Master's Degree in Curriculum and Instruction, she came to the Department of Computing at ETSU seeking an opportunity to change careers. Because she had limited experience in the Computing field, she was required to take several undergraduate foundation courses to prepare her for graduate coursework. I first met Allison during one of these foundation courses, an advanced Java programming course in Spring 2016. Her aptitude for Computing was quite evident during the course, and she was able to complete all foundation courses successfully.

Following her foundational work, Allison began developing an agent-based modeling system with myself and a Biology professor as a possible thesis project. While Allison initially was unfamiliar with the technology used for modeling artificial life, she spent a lot of time researching the appropriate methods for completing the project. Although she ultimately chose to complete the software project track instead of the thesis, she learned a lot of valuable information regarding artificial intelligence and agent-based systems.

Her software project work has involved extensive work with interconnected vehicles. I served as a committee member for this project, and watched the system grow throughout the four-semester project. The developed system involves ad-hoc networks that facilitate taxi hailing with many subprojects including work with mobile applications, microservices architectures, and DSRC VANET technology. This project, while complex, has provided Allison with valuable experiences in vehicular technology.

During the Spring 2018 semester, Allison enrolled in my Artificial Intelligence course—which brought many of her previous studies and experiences together. She truly excelled in this course—not only learning the algorithms involved, but also showing their application to different situations. Her genetic algorithm implementation was able to find the lowest route path in the class on a fifty-city traveling salesman problem. She also investigated the use of Convolutional Neural Networks to autonomous vehicles.

Given my observations of Allison's work, I can say that she holds herself to high standards, and has a drive to succeed in everything she attempts. This drive is evident in her accomplishments in our graduate program, and I have no doubt that she will excel in a computing job. For these reasons, I offer my highest recommendation that you strongly consider Allison as a highly capable and valuable candidate for a position in your company.

Best regards,

Brian T. Bennett, PhD  
Assistant Professor