

January 28, 2020

Clemson University  
School of Mathematical and Statistical Sciences  
220 Parkway Drive  
O-110 Martin Hall  
Clemson, SC 29634-0975

To Whom It May Concern,

I am writing this letter to recommend Evan Branyon enthusiastically for a School of Mathematical and Statistical Sciences undergraduate award.

Evan was a student in my MATH 3600 Intermediate Mathematical Computing class during the Spring 2019 Semester. I will briefly describe the course, and then I will discuss why I believe Evan deserves consideration for a math award.

The chief objective of MATH 3600 is to demonstrate how the computer can be used to solve problems that arise in the mathematical sciences and is directed toward students majoring in the mathematical sciences who have had little or no formal programming experience. During the Spring 2019 Semester, we programmed using **R**, and during the semester, students wrote programs that covered the mathematical science spectrum. From algebra and discrete math, we wrote functions that implemented the Euclidean algorithm and the sieve of Eratosthenes, a function that generated integers in the hailstone sequence, and a function that generated all binary vectors of a given length using a stack. From computational math, we wrote functions that calculated roots of functions using Newton's method, the bisection method, and the secant method. From operations research, we wrote functions that implemented the golden section search, the Nelder-Mead method in one and two dimensions, and functions that solved the celebrated knapsack problem using pruning and a priority queue. Finally, from probability and statistics, we wrote functions that simulated binomial, negative binomial, hypergeometric, and negative hypergeometric geometric random variables.

First, Evan is a good student, owning a 3.86 GPA. He not only earned an A in the course, but out of forty-five students, Evan's final average was sixth-best. This is impressive considering that he had not taken a formal

programming course before he enrolled in MATH 3600. He completed every assignment. He did not miss a single class and paid close attention during my lectures.

However, that is not the main reason that I am nominating Evan for an award. He is simply enthusiastic about mathematics. For instance, after the class was completed, he wanted to learn more about Diophantine equations. I sent him to Dr. Michael Burr.

In summary, he is a student who loves math, works hard, and does well.

Sincerely,

Mark E. Cawood, Ph.D.  
Senior Lecturer  
School of Mathematical  
and Statistical Sciences  
Clemson University