

Darren Schmidt

Department: Mathematics and Statistics
Major: Applied Mathematics and Computer Science Dual Major
Research Advisor: Dr. Insall
Advisor Department: Mathematics and Statistics

Funding Source: OURE Funding

Analysis of an Integral Metric on Hyperspaces

In this paper, we will be investigating how to compute the integral distance defined by Dr. Insall and Dr. Charatonik, and we will analyze the results from this computation. We develop a way to compute the integral distance by using Monte-Carlo Integration, and we analyze the time complexity and the error that results from this method of computation. We also investigate when this distance function is a metric, and how this metric compares to some other common metrics.

Darren is a senior from Fenton, Missouri studying applied mathematics and computer science. He is currently the president of the Academic Competition Organization at Missouri S&T. He plans to attend the University of Florida after graduating for a PhD in mathematics studying algebraic topology