Graph Theory Applications in Cybersecurity

Weizheng Gao[1*], Olumide Malomo[2*], Jianning Su[3], Julian D. Allagan[4], Ephrem Eyob[2],
Shanzhen Gao[2*],
[1]Department of Mathematics and Computer Science, West Virginia State University
[2]Department of Computer Information Systems, Virginia State University
Email: sgao@vsu.edu
[3]Department of Mathematics and Sciences, Midway University
[4]Department of Mathematics, Computer Science and Engineering Technology, Elizabeth City
State University

Graph theory is widely used in many areas such as computer science, in particular, cybersecurity, chemistry, social sciences, and operation research. We will discuss some graph theory applications in cybersecurity here.