Exploring Machine Learning Algorithms for Cyber Attacks' Classification

NVA Pavan Kumar Inguva[1], Oludotun Oni[2], Jacob Bryant[3]

Research Scholar, School of Information Technology, University of the Cumberlands, Kentucky, USA [1]

Professor, School of Information Technology, University of the Cumberlands, Kentucky, USA [2]

Adjunct Professor, PhD Leadership, University of the Cumberlands, Kentucky, USA [3]

Abstract: *Cyber security is like a race between defensive and offensive capabilities. Day by day the attacks are increasing consequently the preventive mechanisms are also raising. The technological evolution must address the cyber security problem effectively. Cyber security is always the cutting-edge technology to which Machine learning added potentiality. Machine learning plays a crucial role cyber-attacks in various dimensions. The recent advancements in usage of Machine learning towards cyber security preventive and detective measures clearly indicates that the Cyber security certainly accelerates. But at the same time the threat framework also takes the advent of innovative machine learning models. In this paper we are intended to explore various machine learning algorithms to classify cyber-attacks, which are very useful in designing efficient threat defensive models*

Keywords: Cyber Security, Machine Learning, cyber-attacks classification