

1125-VH-2960 **Manjuladevi Gottapu*** (manjulanaidu23@gmail.com), Department of Mathematics and CS,
Albany, GA 31705, and **Robert S Owor**. *Testing and Refining Dynamic Statistical Penetration
Testing Security Indices*.

Dynamic and accurate measures for the security of computer systems is still an open question for which much research continues to be carried out. Between 2010 and 2015, researchers at Albany State University, developed theoretical Penetration Testing Statistical Indices for determining the security of a computer system. While much work has been done on the theoretical framework, these indices are yet to be practically tested and refined. In this research, a set of information assurance statistical measures will be tested for computability and practical reliability. Among the content areas for which statistical measures will be tested are reconnaissance, vulnerabilities, threats, attacks and defenses. The analysis of the statistical measures will be done from an attacker's point of view. Refinements and practical adaptations will be made on the statistical measures based on the practical results obtained. Finally a report of findings will be published. (Received September 20, 2016)