Improved Prediction of Vulnerability Exploitation using   
CVSS Base-Score with Optimized Equation Parameters

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**Abstract**

# Introduction

Software vulnerability addressment is an important problem for organizations since exploitation of such vulnerabilities causes preventable costs. This problem tends to grow with time because vulnerabilities are often reported more frequently than they can be fixed. [Find example from VRP?] To minimize losses in spite of increasing numbers of vulnerabilities becoming known, and with limited available resources, organizations must prioritize their vulnerability addressment strategy. Specifically, organizations prioritize vulnerabilities on the basis of the risk each one presents. Risk, in this paper, meaning the likelihood of an event occurring, times the severity of the consequences of that event. In this sense, risk is analogous to the expected value for the random cost variable associated with each vulnerability.

# Methods

# References