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Kandethody M Ramachandran* (ram@usf.edu), 4202 East Fowler Ave, CMC342, Department of Mathematics & Statistics, Tampa, FL 33620-5700. *STOCHASTIC GAME MODELS FOR CYBER SECURITY*. Preliminary report.

First, an attack detection and classification method will be presented. Then, we will discuss a game-theoretic modeling for cyber security by viewing security attack scenarios as an optimization game comprising the interactions between an attacker and administrators and give a model for stochastic game. Attack detection and classification reduces the space of actions for the administrator. In this scenario, a discussion of the Nash equilibrium or best-response strategies for the players (attacker and administrators) will be given. (Received July 20, 2017)