Cisco SBG Research

Objectives

The threat landscape continues to evolve and grow as attackers become more sophisticated and the number of devices connecting through the Internet are expected to grow to 30B by 2020. With a wide set of threats and IT systems growing in complexity, research into finding ways to improve upon Cisco's Security product portfolio and technologies become a key component to Cisco's security health and business success.

As part of Cisco's Security Business group, an advanced research group is focused on further improvements in network intelligence, security and advanced threat. We have several projects that span the many aspects of security that span areas such as vulnerability, threat and risk assessment, detection, mitigation and management. Of particular focus for this request is a project focused on behavioral based intrusion detection.

Required Skills

With a team comprised of network security experts and data scientists we are looking for strong software engineers and in particular those specializing in user interface design. The required skills include:

- Strong programming skills, preferably with experience using Python
- Front end design using Angular CLI
- Knowledge of networking and security preferred
- Knowledge of C/C++ or Java

Equipment / Facilities Necessary

Computing resources (VMs) to develop the front-end application and network connectivity.

Expected Deliverables / Desired Outcomes

The project involves developing and delivering a front-end application to integrate an intrusion detection engine co-located in a network device communicating to some device simulations. The front-end application will demonstrate the engine's ability to affect intrusion detection of these devices as it communicates through the network device.