Attack Mapping for IoT William Bathgate

Technical Report

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Chapter 1 Executive Summary

This thesis examines the security issues associated with the IoT, particularly those within the smart home. In doing so, technologies and attacks are examined. This results in the purpose of this thesis, to develop an attack map which details how an attacker may gain initial access to a part of the smart home IoT infrastructure, followed by subsequent attacks and how one attack may impact or lead to other attacks and what the resulting effect may be on devices, the infrastructure or victim. Finally, the thesis examines common risks that lead to successful attacks and suggests security controls that can be put in place to minimize risk and the likelihood of threats from being realized.