

Intern Requirement

No. of students required	1-2
Preferred Discipline	<ul style="list-style-type: none">• Computer Science• Computer Engineering
Prerequisites/ Skills Required	<ul style="list-style-type: none">• Strong interest in IT security• Proficient in C/C++ and scripting languages• Experience with development on a mobile platform preferred• Knowledge of ARM assembly will be a plus

Project Details

Title	Smart Phone Security
Overview/Background	Smart phones have become increasingly popular. They come with sophisticated operating systems and applications, which support a wide variety of functionality. However, this also leads to more bugs and vulnerabilities in the software, which could pose a security threat to the phone.
Objectives/Scope/ Deliverables	<p>The aim of this project would be to look into existing tools and techniques to test mobile software for bugs and vulnerabilities, and evaluate their potential threat to the phone. The interns will be required to look into the security mechanisms employed by the smart phone platforms to mitigate these threats and evaluate the effectiveness of the smartphone security mechanisms. They will explore and develop new techniques and tools to aid in this process.</p> <p>Smart phone platforms of interest include Symbian, Windows Mobile, Apple iPhone, Android, etc.</p> <p>Scope:</p> <ul style="list-style-type: none">• Research into tools and techniques to look for bugs and vulnerabilities in mobile software, and to evaluate their potential impact• Research into security mechanisms of smart phone platforms and evaluate their effectiveness• Develop new tools and techniques, or improve existing tools to aid vulnerability discovery and evaluation
Project Duration	<input checked="" type="checkbox"/> 2-4 months, or <input checked="" type="checkbox"/> 6 months