

### Intern Requirement

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

### Project Details

Title	Smart Phone Security
Overview/Background	<p>Smart phones have become increasingly popular and come with sophisticated operating systems and applications, which support a wide variety of functionalities. However, this also leads to presence of more bugs and vulnerabilities in the software, which could pose a security threat to the phone.</p> <p>The intern(s) will look into existing tools and techniques to test mobile software for bugs and vulnerabilities, and evaluate their potential threat to the phone. The intern(s) will also look into the security mechanisms employed by the smart phone platforms to mitigate against these threats and evaluate their effectiveness. They will subsequently 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>
Objectives/Scope/ Deliverables	<ul style="list-style-type: none"><li>• Research on tools and techniques to look for bugs and vulnerabilities in mobile software, and evaluate their potential impact</li><li>• Research on security mechanisms of smart phone platforms and evaluate their effectiveness</li><li>• Develop new tools and techniques, or improve existing tools to aid vulnerability discovery and evaluation</li></ul>
Project Duration	<input checked="" type="checkbox"/> 2-4 months <input checked="" type="checkbox"/> 6 months