

CNIT 128: Hacking Mobile Devices

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Catalog Description

Mobile devices such as smartphones and tablets are now used for making purchases, emails, social networking, and many other risky activities. These devices run specialized operating systems have many security problems. This class will cover how mobile operating systems and apps work, how to find and exploit vulnerabilities in them, and how to defend them. Topics will include phone call, voicemail, and SMS intrusion, jailbreaking, rooting, NFC attacks, malware, browser exploitation, and application vulnerabilities. Hands-on projects will include as many of these activities as are practical and legal.

Advisory: CNIT 113 and 123, or equivalent familiarity with hacking computers and operating mobile devices

After successful completion of this course, students will be able to:

- Assess the risks of using mobile devices for common activities such as making phone calls, emailing, and shopping
- Perform jailbreaks for iOS devices and analyze the Android security model and rooting
- Differentiate and describe types of mobile malware and anti-malware options
- Evaluate Web browser services and attacks on mobile platforms and recommend countermeasures
- Configure, deploy, and defeat locking, remote location and wiping services. Outcome 6: Prioritize common mobile app risks and determine how and when to appropriately install and use them.

Textbook

"The Mobile Application Hacker's Handbook 1st Edition", by Dominic Chell, Wiley; 1 edition (February 24, 2015), ISBN-10: 1118958500

Grades

The number of points you accumulate during the semester determines your final grade. Points come from projects, quizzes, and the final exam. Details are on my web site: samsclass.info

Your final letter grade is determined from your total points as shown below:

%	Grade
90% or more	A
80% - 89.99%	B
60% - 79.99%	C
50% - 59.99%	D
49.99% or less	F

This course allows "Pass/No Pass" grading, if that option is requested before the deadline.

Ethics

Security professionals are held to high standards of ethics, like police officers. Lying, copying others' work and passing it off as your own, crude or abusive language, and performing cybercrimes will not be tolerated in this class. Offenders will be punished by losing points, or by immediate expulsion and a final grade of F, at the discretion of the instructor. \

Changes

I reserve the right to change any of these policies as necessary during the semester and will inform you of any changes.