Schedule for Feamster, Nicholas G - 1

8/25/2010

Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Readings
From:10:00AM - 10:00AM
Event type: Academic Calendar

Read Pfleeger & Pfleeger, Sections 1.1-1.4 for motivation and an overview of key security concepts. Read to a moderate degree of detail: Ware (1970), "Security Controls for Computer Systems," Part A, Sections I-V. (Paper is available under "Resources") Discussion question: While reading this paper from 1970 on military computing applications, compare to modern computer systems such as PCs, laptops, websites, and mobile devices. How have security considerations changed, and in what ways have they remained the same?

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Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Due Homework 1
From:10:00AM - 10:00AM
Event type: Deadline

Assignment Homework 1 is due on Aug 25, 2010 10:00 am.

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8/27/2010

Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Readings
From:10:00AM - 10:00AM
Event type: Academic Calendar

Read sections 1.4-1.5 and 1.9-1.10 of Pfleeger and Pfleeger. Read to a moderate degree of detail: Denning and Denning (1979), "Data Security," Introduction and Sections 1 and 2 (access controls and flow controls). (As usual, the paper is available in "Resources") Discussion question: in modern computing systems, which of the described access and flow controls are still in wide use? Think about some plausible reasons why they have survived while others have fallen by the wayside. For your own interest (optional): read "Inside Al Qaeda's Hard Drive" by Cullison (The Atlantic, Sep 2004), available here: http://www.theatlantic.com/magazine/archive/2004/09/inside-al-qaeda-rsquo-s-hard-drive/3428/

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8/30/2010

Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Readings
From:10:00AM - 10:00AM
Event type: Academic Calendar

Read Pfleeger & Pfleeger, Sections 3-3.2 for background on software program flaws and vulnerabilities. For more details on the buffer overflow attacks described in class, reading Aleph One's "Smashing the Stack for Fun and Profit:" http://insecure.org/stf/smashstack.html

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9/1/2010

Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Readings
From:10:00AM - 10:00AM
Event type: Academic Calendar

Read Pfleeger and Pfleeger, Section 3.3 for background on self-replicating code (viruses and worms). Also read to a moderate level of detail: Weaver (2001), "Warhol Worms: The Potential for Very Fast Internet Plagues," here: http://www.iwar.org.uk/comsec/resources/worms/warhol-worm.htm

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9/3/2010

Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Due Homework 2
From:10:00AM - 10:00AM
Event type: Deadline

Assignment Homework 2 is due on Sep 3, 2010 10:00 am.

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Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Readings
From:10:00AM - 10:00AM

Event type: Academic Calendar

Read Pfleeger and Pfleeger, Sections 3.4-3.5.

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9/8/2010   **Site: CS-4235-A, CS-8803-IIS,QIS FALL10**
Event: Readings
From:10:00AM - 10:00AM
Event type: Academic Calendar

Read Karger and Schell (2002) retrospective on Multics and its design for security. Also (re)read Pfleeger and Pfleeger, Section 3.5. We will be discussing design for security through the week.

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9/13/2010   **Site: CS-4235-A, CS-8803-IIS,QIS FALL10**
Event: Readings
From:10:00AM - 10:00AM
Event type: Academic Calendar

Read Karger and Schell (2002) (the "Multics retrospective" paper) in preparation for guest lecturer Jon Giffin.

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9/15/2010   **Site: CS-4235-A, CS-8803-IIS,QIS FALL10**
Event: Readings
From:10:00AM - 10:00AM
Event type: Academic Calendar

Read Loscocco et al (1998), "The Inevitability of Failure: The Flawed Assumption of Security in Modern Computing Environments" Be sure to understand the main concepts discussed in the paper -- in particular, mandatory vs discretionary security, and trusted path -- and why their absence implies inherent security vulnerabilities in various application scenarios. Grant Wagner, the Technical Director of the National Information Assurance Research Laboratory, will present the paper in further detail. Please be prepared for discussion, and come with some questions for him.

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9/20/2010   **Site: CS-4235-A, CS-8803-IIS,QIS FALL10**
Event: Group presentations
From:10:00AM - 11:00AM
Event type: Academic Calendar

Presentation groups today: Gary Grimm et al Adhish Bhobe et al Aaron Menezes-Pinto et al Cary Chichester et al

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Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Due Case Study Group Research
From:10:00AM - 10:00AM
Event type: Deadline

Assignment Case Study Group Research is due on Sep 20, 2010 10:00 am.

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9/22/2010   **Site: CS-4235-A, CS-8803-IIS,QIS FALL10**
Event: Group presentations
From:10:00AM - 11:00AM
Event type: Academic Calendar

Presentation groups today: Matt Whitcomb Yan Wang et al Jimmy Ramsmark et al Michael Contreras et al

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9/24/2010   **Site: CS-4235-A, CS-8803-IIS,QIS FALL10**
Event: Group presentations
From:10:00AM - 11:00AM
Event type: Academic Calendar

Presentation groups today: Serguei Egorov et al Joshua Kayse et al Erica Juergensen et al Bradley Williford et al

Schedule for Feamster, Nicholas G - 3

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9/27/2010

Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Group presentations
From:10:00AM - 11:00AM
Event type: Academic Calendar

Presentation groups today: Michael Gurney et al John Bartz et al Vijay Murali et al Mamta Upadhyay et al

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10/4/2010

Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Due Homework 3
From:10:00AM - 10:00AM
Event type: Deadline

Assignment Homework 3 is due on Oct 4, 2010 10:00 am.

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10/6/2010

Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Readings
From:10:00AM - 10:00AM
Event type: Academic Calendar

Read the Zimmerman and Curtin articles on cryptographic "snake oil" (links available in Resources).

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10/13/2010

Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Due Homework 4
From:10:00AM - 10:00AM
Event type: Deadline

Assignment Homework 4 is due on Oct 13, 2010 10:00 am.

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10/15/2010

Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Midterm Exam
From:10:00AM - 11:00AM
Location: In class, Klaus 2447.
Event type: Exam

Policy: open book/notes. Recommended: prepare a short 'cheat sheet' reference distilling the main course content.

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10/20/2010

Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Readings
From:10:00AM - 10:00AM
Event type: Academic Calendar

Read through Anderson (1993), "Why Cryptosystems Fail" for a discussion of cryptographic failure modes in banking (though most of these points apply universally to crypto).

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10/25/2010

Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Readings
From:10:00AM - 10:00AM
Event type: Academic Calendar

Read Pfleeger and Pfleeger, Sections 7.1-7.2.

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10/27/2010

Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Readings
From:10:00AM - 10:00AM

Event type: Academic Calendar

Read Pfleeger and Pfleeger, Section 7.3

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10/29/2010

Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Readings
From:10:00AM - 10:00AM
Event type: Academic Calendar

Read Pfleeger and Pfleeger, Sections 7.4-7.5.

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11/1/2010

Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Due Homework 5
From:10:00AM - 10:00AM
Event type: Deadline

Assignment Homework 5 is due on Nov 1, 2010 10:00 am.

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11/5/2010

Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Readings
From:10:00AM - 10:00AM
Event type: Academic Calendar

Read Chaum et al (2008), "Scantegrity II" in the Resources section. Optionally read Carback et al (2010), "Scantegrity II Municipal Election," also in Resources.

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11/8/2010

Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Readings
From:10:00AM - 10:00AM
Event type: Academic Calendar

Read Adida (2008), "Helios: Web-based Open Audit Elections"

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11/15/2010

Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Readings
From:10:00AM - 10:00AM
Event type: Academic Calendar

Read Narayanan and Shmatikov (2008), "Robust De-anonymization of Large Sparse Datasets"

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11/19/2010

Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Readings
From:10:00AM - 10:00AM
Event type: Academic Calendar

Read Wright et al (2008), "Spot Me if You Can" in moderate detail. Also see http://citp.princeton.edu/memory/ for information on "cold boot" memory attacks.

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11/24/2010

Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Readings
From:10:00AM - 10:00AM
Event type: Academic Calendar

Read Anderson and Moore (2006), "The Economics of Information Security"

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Schedule for Feamster, Nicholas G - 5

12/3/2010   **Site: CS-4235-A, CS-8803-IIS,QIS FALL10**
Event: Final project presentations
From:10:00AM - 11:00AM
Event type: Academic Calendar

Groups presenting today: Adhish Bhobe et al Matthew Olman et al Alex DeFreese et al Gary Grimm et al

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Site: CS-4235-A, CS-8803-IIS,QIS FALL10
Event: Due Final Project
From:10:00AM - 10:00AM
Event type: Deadline

Assignment Final Project is due on Dec 3, 2010 10:00 am.

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12/6/2010   **Site: CS-4235-A, CS-8803-IIS,QIS FALL10**
Event: Final project presentations
From:10:00AM - 11:00AM
Event type: Academic Calendar

Groups presenting today: Michael Gurney et al Anna Mahlberg et al Dinesh Natarajan et al Richard Reece et al

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12/8/2010   **Site: CS-4235-A, CS-8803-IIS,QIS FALL10**
Event: Final project presentations
From:10:00AM - 11:00AM
Event type: Academic Calendar

Groups presenting today: Michael Contreras et al Aaron Menezes-Pinto et al Jack Morgan et al Asha Ramakrishna et al

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12/10/2010   **Site: CS-4235-A, CS-8803-IIS,QIS FALL10**
Event: Final project presentations
From:10:00AM - 11:00AM
Event type: Academic Calendar

Groups presenting today: Cary Chichester et al Michael Pena et al Abhishek Shroff et al Bradley Williford et al

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