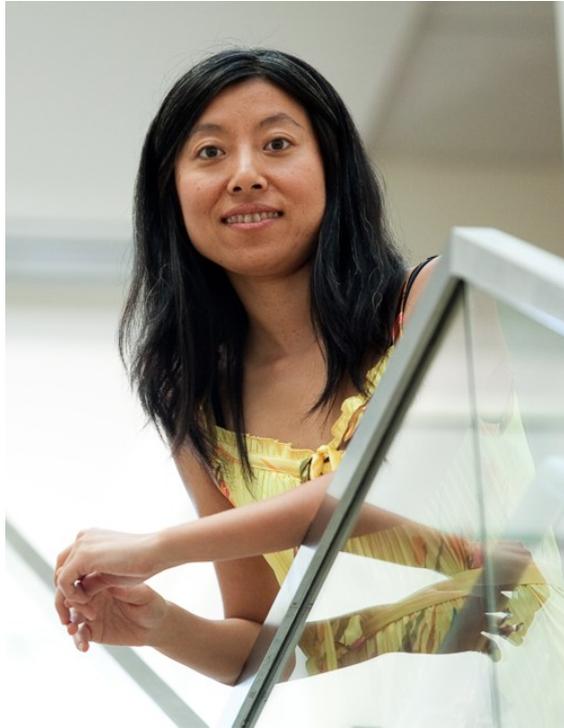


CS161 Computer Security

Overview

Teaching Team



What is Computer Security?

Personal Data & Files



A screenshot of a Windows 'Libraries' window. The window title is 'Libraries'. The ribbon at the top has 'File', 'Home', 'Share', and 'View' tabs. The 'View' tab is active, showing options for 'Preview pane', 'Details pane', 'Medium Icons', 'Small Icons', 'List', and 'Details'. There are also options for 'Group by', 'Image file names', and 'File name extensions'. The main content area shows a Gmail account. The Gmail interface includes the 'Gmail by Google' logo, a search bar with 'メールを検索' (Search emails) and 'ウェブを検索' (Search web) buttons, and a list of email folders: 'メール', '連絡先', 'ToDoリスト', 'メールを作成' (highlighted in red), '受信トレイ', '廃棄トレイ', 'スター付き', '重要', '送信済みメール', '下書き (待)', 'プライベート', '旅行', and '他の 6 個のラベル'. Below the folders is a search bar with '検索, 追加, 招待' (Search, Add, Invite) and a '友だちを招待' (Invite friends) button. The email list shows 1 - 50 / 166 件. The first email is highlighted in yellow and has a date of 6月16日. Other emails have dates ranging from 5月17日 to 10/12/24.

Banking Funds

The screenshot displays the U.S. Bank website interface. At the top left is the **usbank.** logo. To its right are navigation links: [About U.S. Bank](#), [Customer Service](#), [Locations](#), and [en Español](#). A search bar with the text **SEARCH** is located at the top right. Below the logo is the slogan **All of **us** serving you®**.

A dark blue navigation bar contains the following options: **CHOOSE: PERSONAL** (with a dropdown arrow), [Online Banking](#), [Checking & Savings](#), [Credit & Prepaid Cards](#), [Mortgage](#), [Loans & Lines](#), and [Investments & Wealth Management](#).

The main content area features a large banner for investment services. On the left, a man and a woman are looking at a laptop. The text reads: **The control you want. The resources you need.** Below this, it says: **Research, manage and trade with a convenient online self-directed investment account from U.S. Bancorp Investments, Inc.** A blue button labeled **Open an Account ▶** is positioned at the bottom right of the banner.

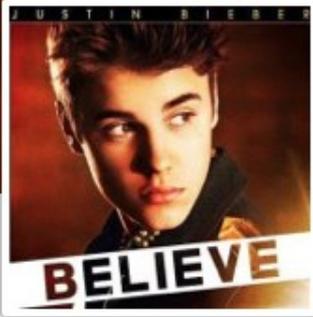
On the right side of the page, there is a login and location-finding section. It includes a **Log In** button with a lock icon and a **Find a Location** button with a location pin icon. Below these are input fields for **User ID** and a dropdown menu for **Internet Banking**. A **Log In** button is located below the input fields. Underneath, there is a link for **Log In Assistance** and a section titled **New to Internet Banking?** with a blue button labeled **Get Instant Access ▶**. At the bottom of this section, there is a partial view of a link for **Homes come in all shapes and sizes.**

Personal Privacy

facebook  Search for people, places and things  Kurt Thomas Find



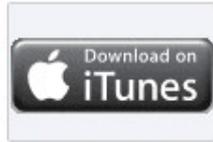
BELIEVE



Justin Bieber
46,217,328 likes · 1,412,713 talking about this

Like Listen Message 

Musician/Band
<http://smarturl.it/jbmktg> www.BIEBERFEVER.com
www.justinbiebermusic.com
www.justinbieberneversaynever.com

About     

Location Privacy



What is Computer Security?

- Allow intended use of computer systems
- Prevent unintended use that may cause harm

Why Should You Care?

- It impacts your day-to-day life

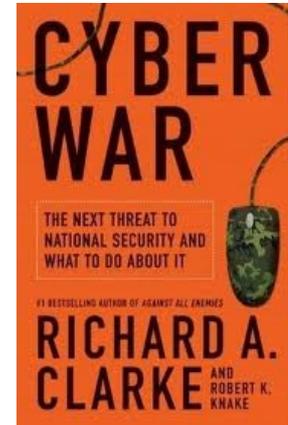


1.35 billion monthly active users as of



Why Should You Care?

- It impacts everybody's day-to-day life
 - Millions of computers compromised
 - Millions of passwords stolen



What Is This Class About?

Learn About Security

Make a Difference

How Can You Make a Difference?

- Be a more security-aware user
 - Make better security decisions
- Be a more security-aware developer
 - Design & build more secure systems
- Be a security practitioner & researcher
 - Identify security issues
 - Propose new security solutions

What Will You Learn in This Class?

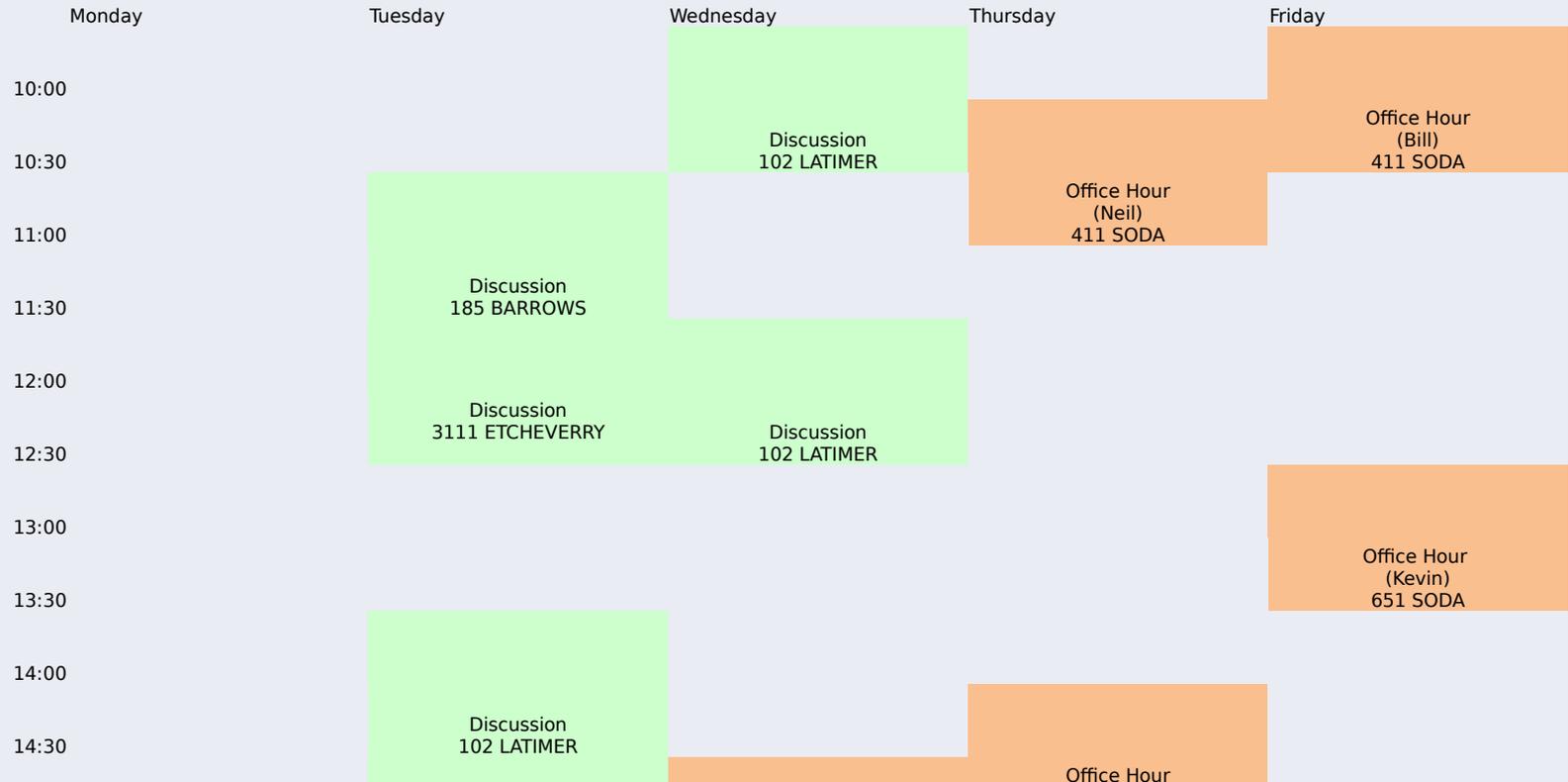
- Security vulnerabilities
- How to exploit them & defend against attacks
- Fundamental security concepts & principles
- How to architect secure systems
- Security problems & solutions in application areas

Topics Covered in Class

- Secure coding
- Secure architecture concepts & principles
- Web security
- Cryptography
- Network security & malware
- Mobile security

Course Format

Course Format



Projects

- 3 Projects
- Hands-on experience for material covered in class
- Done in groups of two
 - Pick partners soon!

Project Schedule

- Project 1: Software Security
 - Out: 2/3, Due: 2/24
- Project 2: Web Security
 - Out: 3/10, Due: 3/31
- Project 3: Network Security
 - Out: 4/14, Due: 5/8

Homeworks

- 3 Homeworks
- Very similar to the problems in the exams
- Done individually

Homework Schedule

- HW 1: Software Security
 - Out: 2/17, Due: 2/26
- HW 2: Security Architecture Principles & Web Security
 - Out: 3/19, Due: 4/7
- HW 3: Crypto & Network Security
 - Out: 4/9, Due: 4/21

Grading

- Homework: 15% (5% each)
- Projects: 45% (15% each)
- Midterm 1 (3/4): 20%
- Midterm 2 (4/29): 20%
- **No Final**

Other Notes

- Piazza – Primary point of contact
- Course text book – None!

Next Steps

- <http://inst.eecs.berkeley.edu/~cs161/sp15/>
- Identify group partners
- Discussion sections start 1/27
- First project 2/3