

Internet Fraud



CJ341 – Cyberlaw & Cybercrime Lecture #7

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Topics

- Internet Fraud & Con Artistry
 - ❑ Identity Theft / Phishing / Pharming / Vishing*
 - ❑ Online Auction Fraud
 - ❑ E-mail Scams / Chain letters / hoaxes
 - ❑ Online Prostitution & Mail-Order Brides
 - ❑ Human Trafficking
- Cybercrimes involving Fraud
 - ❑ Mail and Wire Fraud
 - ❑ Access Devices
 - ❑ Stock Fraud
 - ❑ Identity Theft
 - ❑ Forgery
 - ❑ Computer Extortion
- Cyberterrorism

* Vishing = Voice-mail Phishing
Criminals use VoIP systems to send fake messages to phones asking victim to call back and give name and credit-card number.

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Fraud Defined



- Deception for gain (i.e. personal)
- Intent to deceive, trick, defraud
- Examples
 - ❑ Bait and switch
 - ❑ Identity theft
 - ❑ Confidence games; e.g.,
 - ✓ Nigerian 419 advance-fee fraud
 - ✓ Pyramid (Ponzi) scams



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Criminal & Civil Liability



- Fraud = Criminal Act
- Fraud = Civil wrong (A tort)
 - ❑ The Law provides remedies for civil wrongs
 - ❑ Example: Civil Fraud
 - ✓ Making a false representation to a person's detriment, which is relied upon by another
- Existing federal laws seem to criminalize activity after damage is done
 - ❑ Consumer has already been defrauded
 - ❑ Include wire fraud, identity theft, credit card fraud, computer fraud
 - ❑ Trade laws, possibly including new federal CAN SPAM Act

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Elements of Fraud



- **Incentive:** want or need to commit fraud.
- **Opportunity:** weakness in system that right person could exploit. Fraud is possible.
- **Rationalization:** I have convinced myself that this fraudulent behavior is worth the risks.
- **Capability:** I have the necessary traits and abilities to be the right person to pull it off. I have recognized this particular fraud opportunity and can turn it into reality.



<http://www.nysscpa.org/cpajournal/2004/1204/images/ex1p38.pdf>

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Elements of Fraud



- A representation
 - ❑ Falsity of representation
 - ❑ Materiality of representation
 - ❑ Speaker's knowledge of falsity of representation
 - ❑ Speaker's intent it should be relied upon
- The hearer's ignorance of falsity of representation
 - ❑ Hearer's reliance on representation
 - ❑ Hearer's right to rely on representation
 - ❑ Hearer's consequent and proximate injury caused by reliance on representation



Taylor v. State Compensation Insurance Fund, 175 Mont. 432, 913 P.2d 1242 (1996)

See http://wcc.dli.mt.gov/TOOLS/Fraud_Elements.htm

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Identity Theft

➤ 18 USC § 1028

- ❑Criminalizes acts comprising fraud in connection with identification documents

➤ See Class Lecture 4

- ❑Identity Theft Statistics
- ❑Methods Used by ID Thieves
 - ✓Carding
 - ✓Dumpster® Diving
 - ✓Credit-Card Skimming
 - ✓Shoulder Surfing
 - ✓Retail Scams
 - ✓Internet Scams
 - ✓Government Impersonation
- ❑Responding to ID Theft



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Online Auction Fraud

➤ eBay, Yahoo, MSNBC...

➤ Fundamental problems:

- ❑Thieves selling non-existent stuff
- ❑“Auctions” run by shills to drive up price

➤ Auction anti-con-artist vigilante

- ❑Ordered a laptop via auction (2002)
- ❑6 weeks later received by FedEx lap-top sized box containing Montreal phonebook

➤ Ludicrous auctions (selling family, island, etc.)

➤ Illegal auctions (body parts, children)

➤ 21 year old Australian facing fraud charges for sale of non-existent iPods on Internet (Sep 2006)

➤ Japan: Internet auction fraud = top cyber crime



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Scams / Hoaxes

➤ E-mail scams / Chain letters/ hoaxes

- ❑Example: Bill Gates giving away money
- ❑Don't forward unverified rumors; verify first at a number of Web sites (e.g., snopes.com, vmyths.com)
- ❑If it's too good to be true...

- Phishing (see lecture 4)
- Pharming (using fake Web sites for fraud)
- Vishing – using voice mail for fraud



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<http://www.snopes.com>

Snopes.com
Rumor Has It



Search

Sears

50% OFF MATTRESSES

SHOP NOW

TAKE AN EXTRA 10% OFF
Mattress and/or foundation purchases over \$499
No interest for 24 months*, free delivery*
*after mail in rebate on purchases over \$499



What's New?

Hottest 25 Legends

Glossary

Donate

Weird News

From the archives:

Jeep at Half the Price: Two men are still making payments on a Jeep Cherokee they sent to the bottom of a frozen lake during a duck-hunting mishap.



Autos



Business



Cokelore



College



Computers

Snopes (cont'd)



Crime	Critic Country	Disney	Embarrass	Fauxtography
Food	Fraud & Scams	Glurge Gallery	History	Holidays
Horrors	Humor	Inboxer Rebellion	Language	Legal
Lost Legends	Love	Luck	Media Matters	Medical
Military	Movies	Music	Old Wives' Tales	Politics
Pregnancy	Quotes	Racial Rumors	Radio & TV	Religion
Risqué Business	Science	Sports	Titanic	Toxins
Travel	Weddings	Rumors of War	Hurricane Katrina	Search

Online Prostitution & Mail-Order Brides



➤ Prostitution said to be “world's oldest profession”

➤ Unknown number of escort and mail-order bride Web sites

➤ Exchange of money for service

➤ Internet has revolutionized way these agencies conduct business

- ❑Studies show that many photos have dozens or hundreds of different names
- ❑Some photos actually gleaned from Google Images
- ❑Some “nubile 18 year olds” actually 75 year olds – or men



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Online Prostitution (cont'd)

- Fraud risks – Examples
 - ❑ Women themselves defrauding men (and vice versa);
 - ❑ Agencies scamming (e.g., requiring payment of funds for travel or visit; often once payment is wired, "love letters" stop).
- Potential red flags:
 - ❑ Within few letters, professes true love
 - ❑ Repeated mention of honesty
 - ❑ Indicates poverty –no money
 - ❑ General (non-specific) communications, as some scammers "work" many individuals at a time
- Legal Issues
 - ❑ Identity theft
 - ❑ International investigation of fraudulent activity
 - ❑ Immigration concerns



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Human Trafficking (Slavery) Aided by Internet

- Women (mostly) responding to Internet ads for work
- E.g., "DA: Woman turned into sex slave after internet meeting"
 - ❑ < <http://tinyurl.com/3tobt4n> >
 - ❑ 27-year-old Wisconsin woman tried to exchange housework for free lodging in NYC
 - ❑ Trapped in man's apartment 9 days
 - ❑ Tied with hope, gagged, handcuffed
 - ❑ Repeatedly raped
 - ❑ Finally able to call her mother for help
 - ❑ Police found her bruised and shaking
 - ❑ Arrested owner of apartment

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Mail & Wire Fraud

- Mail & Wire Fraud statutes
 - ❑ Can be used to prosecute those who used computers and Internet to commit fraud
 - ❑ Even though not cybercrime-specific
- Can be used in tandem
- Use of mail or electronic communications in carrying out some other fraud exacerbates crime
- Note general federal conspiracy provision (18 USC § 1341) could also apply & add to charges
- Investigated by USPS – United States Postal Inspection Service < <https://postalinspectors.uspis.gov/> >



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Mail & Wire Fraud (2)

- Mail Fraud, 18 USC § 1341

An offense for anyone who, "having devised or intending to devise any scheme or artifice to defraud, or for obtaining money or property by means of false or fraudulent pretenses" uses U.S. mails or "any private or commercial interstate carrier" (e.g., FedEx) "for purpose of executing such scheme or artifice or attempting to do so"
- Key Elements:
 1. Defendant devised or intended to devise scheme to defraud (INTENT); and
 2. Mails used for purpose of executing scheme to defraud (ACT)



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Mail & Wire Fraud (3)

- Wire Fraud, 18 USC § 1343
 - ❑ An offense for anyone who, "having devised or intending to devise any scheme or artifice to defraud, or for obtaining money or property by means of false or fraudulent pretenses, representations, or promises, transmits or causes to be transmitted by means of wire, radio, or television communication in interstate or foreign commerce, any writings, signs, signals, pictures, or sounds for purpose of executing such scheme or artifice [to defraud]"
- Fraudulent activity involving interstate wire (electronic) communications (including Internet)
 - ❑ Key Elements:
 - ✓ 1. Defendant intentionally participated in a scheme to defraud or for obtaining money or property by means of false or fraudulent pretenses (INTENT); and
 - ✓ 2. that wire transmissions were used for purpose of executing scheme to defraud

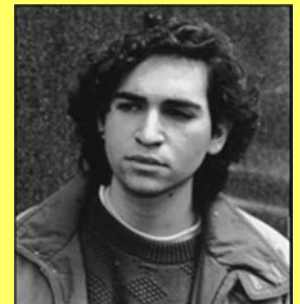


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US v. LaMacchia (1994)

- David LaMacchia was 21 year old MIT student
 - ❑ Invited anyone to upload and download illegal copies of proprietary software
 - ❑ Could not be tried under copyright violations 18 USC § 506(a) because no personal monetary benefit
 - ❑ Indicted under wire fraud statute



(cont'd)

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US v. LaMacchia (cont'd)

➤ Case dismissed

❑ No money, no fraud

❑ Court ruled that

✓ illegal copies of intellectual property are not property that is

✓ "stolen, converted or taken by fraud"

✓ under Stolen Property Act

❑ Led directly to passage of *No Electronic Theft Act of 1997*

✓ Removed requirement for financial gain from 18 USC § 506(a) as basis for prosecution



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Anatomy of a Wire Fraud

➤ True case study of complicated wire fraud attempted against small US credit union

➤ Investigated by Norwich University's

❑ Prof Peter Stephenson, PhD, VSM, CISSP, CISM, FICAF

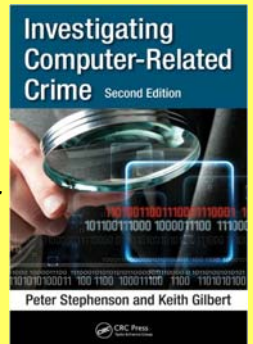
❑ Director, Norwich University Center for Advanced Computing and Digital Forensics

❑ Associate Professor of Digital Forensics

❑ Chief Information Security Officer

❑ Distinguished author

❑ Keith Gilbert – NU BSc CSIA '2010



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Wire Fraud Fundamentals (1)

➤ WIRE FRAUD - 18 USC 1343, makes it Federal crime or offense for anyone to use interstate wire communications facilities in carrying out scheme to defraud.*

➤ A person can be found guilty of that offense only if all of following facts are proved beyond a reasonable doubt:

1. That person knowingly and willfully devised scheme to defraud, or for obtaining money or property by means of false pretenses, representations or promises; and
2. That person knowingly transmitted or caused to be transmitted by wire in interstate commerce some sound for purpose of executing scheme to defraud.

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* The "Lectric Law Library - <http://www.lectlaw.com/def2/w017.htm>

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Wire Fraud Fundamentals (2)

➤ Not necessary for government to prove

- ❑ All of details concerning precise nature and purpose of scheme; or that
- ❑ Material transmitted by wire was itself false or fraudulent; or that
- ❑ Alleged scheme actually succeeded in defrauding anyone; or that
- ❑ Use of interstate wire communications facilities was intended as specific or exclusive means of accomplishing alleged fraud.



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Wire Fraud Fundamentals (3)

➤ What must be proved is that

❑ Person knowingly and willfully devised or intended to devise scheme to defraud; and that

❑ Use of interstate wire communications facilities was closely related to scheme because person either

- ✓ Transmitted something or
- ✓ Caused it to be transmitted
- ✓ In interstate commerce
- ✓ In attempt to execute or carry out scheme.



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Wire Fraud Fundamentals (4)

➤ To "cause" interstate wire facilities to be used is to

- ❑ Do an act with knowledge that
- ❑ Use of wires will follow in ordinary course of business or
- ❑ Where such use can reasonably be foreseen.

➤ Each separate use of interstate wire facilities in furtherance of scheme to defraud constitutes separate offense.



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The Scenario – Intelligence Gathering



Fraudster obtains information about depositor including:

- Name
- Address
- SSN
- Password verification question/answer
- Signature
- Account balance
- Account number
- Phone number



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Scenario – Gaining Access



➤ The fraudster social engineers credit-union customer-service agents to obtain:

- ☐ Access to customer's account
- ☐ New password
- ☐ Wire transfer

➤ The fraudster social engineers phone company to obtain:

- ☐ Telephone number redirect to throwaway cell phone



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What Fraudster Needs to Commit Fraud



- Customer name
- Customer address
- Customer social security number
- Customer account number
- Customer date of birth and other personal information such as mother's maiden name
- Customer password to on-line banking
- Customer account balance and date/amount of last transaction
- Customer phone number as shown in credit union records



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The Fraud (1): Background



- Fraudster searches county property records
 - ☐ Targets several owners of large properties
 - ☐ With mortgages held by credit union
- Fraudster gathers as much information from public records as possible
- Uses cell phone camera to photograph signatures of owners on public copies of deeds
- The fraudster goes to genealogy site and locates victim
 - ☐ Obtains maiden names of mother and other relatives



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The Fraud (2)



- The fraudster obtains
 - ☐ Phone numbers using reverse phone directories and
 - ☐ For a few dollars obtains Social Security Numbers, dates of birth and other personal information about owners from on-line services.
- Armed with personally identifiable information, fraudster
 - ☐ Calls credit union and
 - ☐ Social engineers owner's account number from customer service agent.
 - ☐ Several ways to do this such as woman pretending to be an owner's wife. . . .



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People Searches (1)



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People Searches (2)



FIND AN EMAIL ADDRESS

- » AOL E-Mail Finder
- » EmailChange.Com
- » Email Finder
- » E-Search (Ireland)
- » ICQ
- » InfoSpace - Email Search
- » Internet Address Finder
- » MyEmailAddress.Is (Meta)
- » Search.com (Meta)
- » Usenet Addresses Service
- » Yahoo! People Search

LOCATE A PHONE NUMBER

- » 192.com (United Kingdom)
- » 411 Locate
- » Addresses.com
- » AOL White Pages
- » InfoSpace White Pages
- » InfoUSA
- » Switchboard
- » White Pages (Australia)
- » White Pages (Belgium)
- » White Pages (Canada)
- » White Pages (Hong Kong)
- » White Pages (Netherlands)
- » White Pages (New Zealand)
- » White Pages (Pakistan)
- » White Pages (Samoa)
- » White Pages (Singapore)
- » White Pages (Vanuatu)
- » White Pages (United Kingdom)
- » WhoWhere?
- » Yahoo! People Search

Find People Free

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DOMAIN NAME OWNER SEARCH

- » Whois (Aunic - Australia)
- » Whois (Canada)
- » Whois (Internet .com)
- » Whois (New Zealand)
- » Whois (South Africa)
- » Whois (UK)

SEARCH: COLLEGE/UNI

- » Alumni.net
- » Australian UNI Online (Links)
- » CSDO Phonebook Server
- » Classmates.Com
- » College Email Addresses
- » New And Times
- » Organisation Directories (Australia)
- » Teacher Source

SEARCH: MEDICAL/HEALTH

- » Adult Certified Doctors
- » Aviation Medical Examiners (AUS)
- » Australian E-Medical List
- » Fock-A-Deputy
- » Health Professionals (Virginia)
- » HealthSource (U.S.)
- » Medical Board (Georgia)
- » On-Line Doctor Finder (AUS)
- » Physician Search (Oklahoma)

SEARCH: LEGAL

- » Attorney Directory
- » California State Bar Members
- » Justice of the Peace (Qld)
- » LawOffice.Com
- » Lawyer's Quick Search
- » Australian Lawyers Email Directory
- » Maryland-multiple Lawyer Locator

SEARCH: CELEBRITIES

- » CelebrityAddress.com

SEARCH: AVIATION

- » London - Certified Pilot Search
- » Aviation Medical Examiners
- » Aviation Disputed Examiners
- » A & P Mechanics Database

REVERSE PHONE SEARCH

- » 411 Locate
- » Anywho
- » InfoSpace
- » 844

META PEOPLE SEARCHES

- » PeekYou
- » Tru
- » Voo
- » ZabaSearch.com

SEARCH IN: NEWSGROUPS

- » Usenet Address Service
- » Google Groups

SEARCH: PUBLIC RECORDS

- » SSN Database
- » Public Records Australia

RECORDS SEARCH: SSN

- » SSN Death Index
- » SSN Number Validation
- » SSN State Lookup

RECORDS SEARCH: LICENSING

- » License Information (Florida)
- » License Information (Tennessee)
- » License Information (Utah)

SEARCH VITAL RECORDS

- » Births, Deaths, Marriages (ACT)
- » Births, Deaths, Marriages (NSW)
- » Births, Deaths, Marriages (QLD)
- » Births, Deaths, Marriages (SA)
- » Births, Deaths, Marriages (TAS)
- » Births, Deaths, Marriages (VIC)
- » Births, Deaths, Marriages (WA)
- » Clark County - Nevada
- » Colorado Marriage & Divorce
- » FL - Civil Court Marriage
- » Kentucky Vital Records
- » U.S. VIM Records (Info)
- » Virginia Vital Records (Reference)

SEARCH: MILITARY

- » American Veterans (Oval Up)
- » Marine Guard Boats
- » Military City - Military Registry
- » Military Personnel Records (Info)
- » POW/MIA Search
- » Shovelers
- » U.S. Air Force Leaders
- » U.S. Army (Active) (Info)
- » U.S. Navy Directory X-500

SEARCH: CRIMINAL RECORDS

- » Criminal History (Australia)(Info)
- » FL - Hillsborough Arrest Inquiry

SEARCH DIRECTORIES

- » People Search Links (International)
- » People Search (UK)
- » People Finder (Philippines)
- » People Searches (New Zealand)
- » People Search (Australia)(Site also provides a free people finder registry)

SEARCH: MILITARY

- » American Veterans (Oval Up)
- » Marine Guard Boats
- » Military City - Military Registry
- » Military Personnel Records (Info)
- » POW/MIA Search
- » Shovelers
- » U.S. Air Force Leaders
- » U.S. Army (Active) (Info)
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The Fraud (3): Redirect



➤ The fraudster now has:

- ☐ Name
- ☐ Address
- ☐ Phone number
- ☐ Account number
- ☐ Mother's maiden name
- ☐ Victim's signature

➤ Now fraud begins

- ☐ The fraudster social engineers phone company to redirect victim's phone number to throw-away cell phone using credible pretext



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The Fraud (4): Wire Transfer



➤ Fraudster calls credit union and social engineers new password

➤ Next, fraudster logs into victim's on-line account to gather account information

➤ Then fraudster calls credit union again (some days may pass between calls) at different time of day to ensure different customer service agent

- ☐ Requests wire transfer to bank in Spain

- ☐ Call is made late Friday Spanish time



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The Fraud (5): Authentication



➤ The credit union authenticates fraudster

- ☐ Mother's maiden name
- ☐ Date of birth
- ☐ Address, SSN, etc.
- ☐ Date and amount of most recent transaction in account
- ☐ Calls fraudster back on phone number of record (now redirected to fraudster's throw-away phone)
- ☐ Faxes wire transfer form



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The Fraud (6): Signature



➤ The fraudster:

- ☐ Fills out form
- ☐ Adds signature obtained from county mortgage records

- ☐ Faxes form back to credit union

➤ The credit union:

- ☐ Compares signature
- ☐ Transfers money (\$600K in this case) out of victim's account to bank in Spain



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Outcome



- By coincidence, victim checked his account as all of this was happening and found that \$600K was missing – called credit union
- The credit union tried to stop transaction but was too late
- Fraud-prevention officer contacted bank in Spain which was just closed; however, someone did answer phone
- Spanish bank had stopped withdrawal of funds by fraudster since there had been “suspicious activity on account in past” (officer of Spanish bank)
- Money was returned but fraudster never was caught.

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Fraud & Access Devices

- 18 USC § 1029 (See Clifford p. 54+)
- Federal crime to engage in certain activities involving “access devices”
“any card, plate, code, account number, electronic serial number, mobile identification number, personal identification number, or other telecommunications service, equipment, or instrument identifier, or other means of account access that can be used...to obtain money, goods, services, or anything of value”
- Also prohibits activities involving counterfeit access devices
“any access device that is counterfeit, fictitious, altered, or forged, or an identifiable component of an access device or a counterfeit access device”



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Fraud & Access Devices (cont'd)

□Key:

- ✓ Any unauthorized device designed or used for fraudulent access to resources



- Money (e.g., fund transfers, payment); goods; services (e.g., phone cards, network, cable TV), anything of value

- Includes credit cards obtained fraudulently or generated for fraud

- Forbids production, trafficking in, control or custody of, or possession of device-making equipment with intent to defraud

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Fraud & Access Devices: Marcus Abercrombie (2005)

- GA man pled guilty to charges of access device fraud and conspiracy to commit access device fraud
- Stole >\$200K in all
- Abercrombie & accomplices exchanged bar codes on merchandise
 - Bought items at significantly reduced prices
 - Returned merchandise to other stores
 - Received store credit for items in store debit cards
 - Also fenced fraudulently obtained Home Depot & Lowe's merchandise and store debit cards over eBay and through pawn shop
- Renovated 2 homes using fraudulently-acquired store credit



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Fraud & Access Devices (cont'd)

- U.S.A.P.A.T.R.I.O.T. Act added new subsection to 18 USC § 1029 to confer extraterritorial jurisdiction (ability of government to exercise authority beyond its normal boundaries) where anyone acts outside jurisdiction of US and engages in any act that would constitute an offense if committed within jurisdiction of US, if two conditions are met:
 1. offense involves access device issued, owned, managed or controlled by financial institution or other entity within jurisdiction of US; and
 2. person transports, delivers, stores, or holds article used in commission of offense within jurisdiction of US

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Stock Fraud: Motley Fool



- 1996.03 – Iomega high-capacity removable disk drives slammed by false information
- America Online's Motley Fool bulletin board
 - False information
 - Flaming and physical threats
- Caused volatility of stock prices
- People who know which way stock will rise or fall can make money on trades

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Stock Fraud: PairGain



- 1999.04: Gary Dale Hoke arrested by FBI
 - ❑ Employee of PairGain, CA telephone equipment company
- Created bogus Web page
 - ❑ Simulated Bloomberg information service
 - ❑ Touted PairGain stock
 - ✓ "Undervalued – impending takeover"
- Pointed to fake page using Yahoo msg boards
 - ❑ Investors bid up price of PairGain stock from \$8.50 to \$11.12 (130%)
 - ❑ 13.7 M shares traded – 700% normal volume
- Sentenced (Aug 1999) to home detention, probation, U\$93K restitution
 - ❑ See < <http://articles.latimes.com/1999/aug/31/business/fi-5307> >



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Stock Fraud: Emulex



- 2000.98: Emulex lost 60% of total share value
 - Mark Jakob, 23 years old
 - Fabricated news release
 - Sent from community college computer
 - Circulated by Dow Jones, Bloomberg
 - Claimed profit warning, SEC investigators, loss of CEO
 - Jakob profited by \$240,000 in minutes

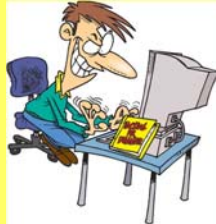
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Forgery



- Distinct offense in some states; e.g.,
 - "Any person who creates, alters, or deletes any data contained in any computer or computer network, who if such person had created, altered, or deleted a tangible document or instrument would have committed forgery...shall be guilty of crime of computer forgery."* (Clifford, citing Georgia statutes)
- Some states also specifically criminalize use of computers to commit fraud
- Other states increase penalties if computer used to devise or execute scheme to defraud
- Note: A person can be charged with violations of federal law AND state law



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Extortion and Blackmail



- Extortion: threatening harm unless victim complies with stated conditions
 - ❑ "Pay us money or we will cook your dog."
- Blackmail: form of extortion involving revelation of something victim wants kept secret
 - ❑ "Pay us money or we will reveal that *you* cooked your dog."
 - ❑ "Pay us money or we will reveal that you voted for _____."



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Computer Extortion / Blackmail



- Some states expressly criminalize use of computer to commit extortion
 - Various Ways:



- ❑ 1. Include extortion into definition of computer fraud
- ❑ 2. Include computer extortion into state's general extortion statute
- ❑ 3. Make computer extortion an offense that incorporates authorized access/ hacking and cracking statutes

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Computer Extortion / Blackmail: Examples



- Mayor Michael Bloomberg (2000)
 - ❑ Oleg Zezov, 29 a Kazakhstan computer expert
 - ❑ Threatened multi-billionaire Bloomberg with release of company secrets (before Bloomberg became mayor of NYC)
 - ❑ Demanded \$200K in payment
 - ❑ Arrested in sting operation in London
 - ❑ Sentenced to 4 years in federal prison



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Cyberterrorism

- *"Leveraging of a target's computers and information technology, particularly via Internet, to cause physical, real-world harm or severe disruption with aim of advancing attacker's own political or religious goals."* (Wikipedia)
- A few states expressly outlaw cyberterrorism; e.g., Connecticut has an offense described as "computer crime in furtherance of terrorist purposes"



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Belgian ATC Fraud

1997.01 — Reuters

- Belgian lunatic broadcasting false information to pilots
- Air-Traffic Control caught false information in time to prevent tragedy
- Serious problem for air safety
- Police unable to locate pirate transmitter
- Lunatic thought to be former ATC employee



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Now go and study

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