Computer Science E-1

Understanding Computers and the Internet

Lecture 14: Computer Science

Thursday, 12 January 2006

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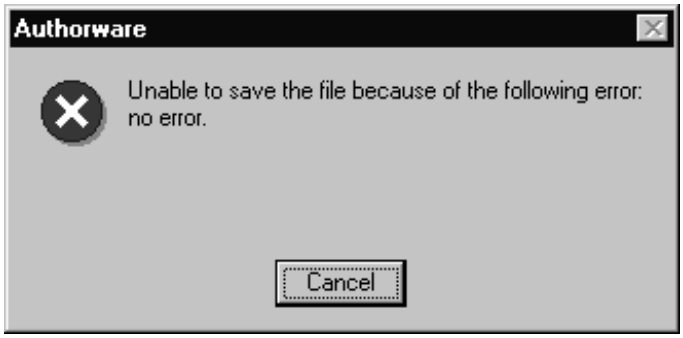
Error Messages

Error Messages

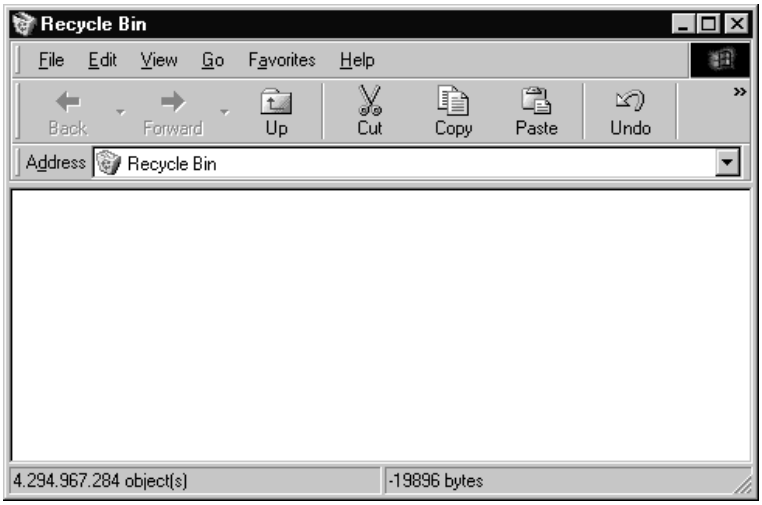
```
            DSR CTS
*** STOP:  0x0000000A  (0x00000000, 0x0000001a, 0x00000000, 0x00000000)
IRQL_NOT_LESS_OR_EQUAL

p4-0300 irql:1f  SYSVER:0xf000030e

Dll Base DateStmp - Name              Dll Base DateStmp - Name
80100000 2e53fe55 - ntoskrl.exe       80400000 2e53eba6 - hal.dll
80010000 2e41884b - Aha154x.sys       80013000 2e4bc29a - SCSIPORT.SYS
8001b000 2e4e7b6b - Scsidisk.sys      80220000 2e53f238 - Ntfs.sys
fe420000 2e406607 - Floppy.SYS        fe430000 2e406618 - Scsicdrm.SYS
fe440000 2e406659 - Fs_Rec.SYS        fe450000 2e40660f - Null.SYS
fe460000 2e4065f4 - Beep.SYS          fe470000 2e406634 - Sermouse.SYS
fe480000 2e42a4a4 - i8042prt.SYS      fe490000 2e40660d - Mouclass.SYS
fe4a0000 2e40660c - Kbdclass.SYS      fe4c0000 2e4065e2 - VIDEOPRT.SYS
fe4b0000 2e53d49d - ati.SYS           fe4d0000 2e4065e8 - vga.sys
fe4e0000 2e406655 - Msfs.SYS          fe4f0000 2e414f30 - Npfs.SYS
fe510000 2e53f222 - NDIS.SYS          fe500000 2e40719b - elnkii.sys
fe550000 2e406697 - TDI.SYS           fe530000 2e47c740 - nbf.sys
fe560000 2e5279d9 - nwlnkipx.sys      fe570000 2e53a89e - nwlnknb.sys
fe580000 2e494973 - tcpip.sys         fe5a0000 2e5256b8 - afd.sys
fe5b0000 2e5279d3 - netbt.sys         fe5d0000 2e4167f7 - netbios.sys
fe5e0000 2e4066b3 - mup.sys           fe5f0000 2e4f9f51 - rdr.sys
fe630000 2e53f24a - srv.sys           fe660000 2ef16062 - nwlnkspx.sys

Address     dword dump  Build [1057]                                - Name
FF541E4c    fe5105df  fe5105df  00000001  ff640128  fe4a8228    000002fe  - NDIS.SYS
ff541e60    fe501368  fe501368  00000246  00004002  00000000    00000000  - elnkii.sys
ff541eb4    fe481509  fe481509  ff6688c8  ff668288  00000000    ff668138  - i8042prt.SYS
ff541ee0    fe481ea8  fe481ea8  fe482078  00000000  ff541f04    8013c58a  - i8042prt.SYS
ff541ee4    fe482078  fe482078  00000000  ff541f04  8013c58a    ff6688c8  - i8042prt.sys
ff541ef0    8013c58a  8013c58a  ff6688c8  ff668040  80405900    00000031  - ntoskrnl.exe
ff541efc    80405900  80405900  00000031  06060606  06060606    06060606  - hal.dll

Restart and set the recovery options in the system control panel
or the /CRASHDEBUG system start option if this message reappears,
contact your system administrator or technical support group.
CRASHDUMP: Initializing miniport driver
CRASHDUMP: Dumping physical memory to disk:    2000
CRASHDUMP: Physical memory dump complete
```


Error Messages

Error Messages



Error Messages



Error Messages

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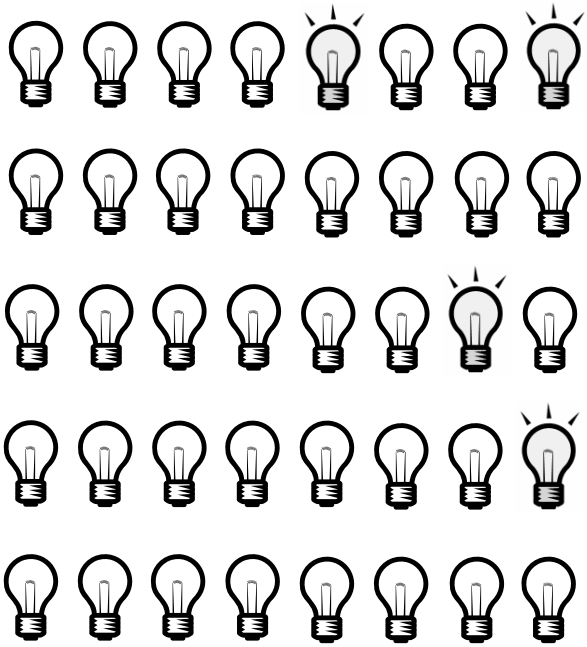
Lecture 1

Hardware



Lecture 2

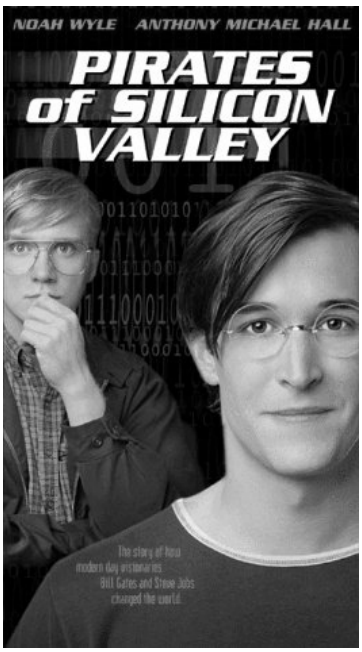
Hardware, Continued

Lecture 3

Software

"The revolution came when we weren't looking. It happened in a garage. In a dorm room. In countless hours of effort, imagining and intrigue. Apple® co-founder Steve Jobs and Microsoft® co-founder Bill Gates were changing the way the world works, lives and communicates.

The event-packed saga of the quirky visionaries who jump-started the future unfolds with exhilarating, cutting-edge style in *Pirates of Silicon Valley*. Noah Wyle (*ER*) portrays Jobs and Anthony Michael Hall (*The Breakfast Club*) portrays Gates in this chronicle of the fierce and often personal computer empire. 'The story is almost Shakespearean—it's a tale of lust, greed, ambition, love and hate,' writer/director Martyn Burke reflects. And it's a success story unlike any other."



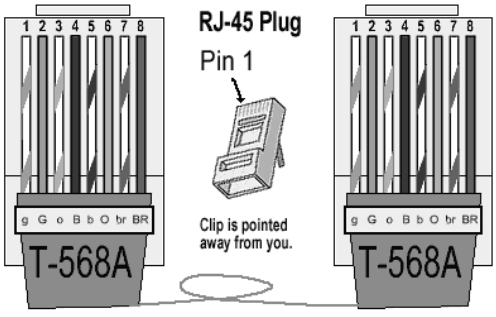
Lecture 4

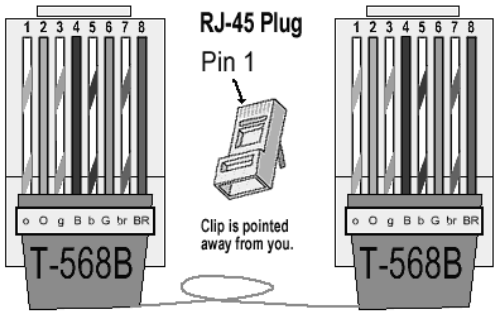
The Internet

```
From: diplomaguy@diplomas.for.you
Subject: --Bachelor's, Master'a, PhD's!—
Date: Tue, 26 Aug 2003 15:32:38 -0400 (EDT)

U N I V E R S I T Y   D I P L O M A S

Obtain a prosperous future, money earning power,
and the admiration of all.

Diplomas from prestigious non-accredited
universities based on your present knowledge
and life experience.

No required tests, classes, books, or interviews.

Bachelors, masters, MBA, and doctorate (PhD)
diplomas available in the field of your choice.

No one is turned down.

Confidentiality assured.

CALL NOW to receive your diploma
within days!!!

1 - 2 8 1 - 5 8 7 - [...]
                or
1 - 6 1 5 - 3 6 6 - [...]

Call 24 hours a day, 7 days a week, including
Sundays and holidays.
```


Lecture 5

The Internet, Continued





Images from http://www.incentre.net/incentre/frame/ethernet.html, copyright © The Internet Centre.

Lecture 6

Surprise

Bitter?	Disc, DAT, or the Other Thing		World Wide Wait	Exam 1
$200	$200	$200	$200	$200
$400	$400	$400	$400	$400
$600	$600.	$600	$600	$600
$800	$800	$800	$800	$800
$1000	$1000	$1000	$1000	$1000

Lecture 7

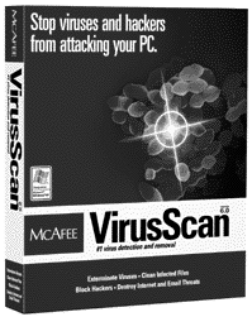
Multimedia

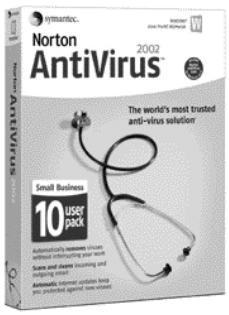
Lecture 8

Security

Lecture 9

Security, Continued





Lecture 10

Website Development

```
<!DOCTYPE html
     PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
     "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html>
  <head>
    <title>Hello, World!</title>
  </head>
  <body>
    Hello, World!
  </body>
</html>
```

Source from http://www.fas.harvard.edu/~cscie1/distribution/lectures/10/markup/hello.html.

Lecture 11

Programming

Self-Counting Algorithm for Students

1. Stand up.
2. Assign yourself the number 1.
3. Find someone else that is standing up. (If no one is standing, remain standing until I call on you.)
4. Add your number to that person's number; the total is your new number.
5. One of you should then sit down—decide who sits however you want.
6. The person still standing should now go back to step 3.

It's Peanut Butter Jelly Time!

http://courses.dce.harvard.edu/~cscie1/distribution/lectures/14/banana.swf

It's Peanut Butter Jelly Time!

Take 1

1. Locate jars of peanut butter and jelly, a loaf of bread, and a knife.
2. place jars, loaf of bread and knife on a clean counter
3. take two slices of bread from the loaf and place them on the clean counter
4. take the knife and scoop out just enough peanut butter to cover the blade of the knife
5. spread the peanut butter on the knife onto one of the slices of bread
6. next take the knife and scoop out just enough jelly to cover the blade of the knife
7. spread the jelly on the knife onto one of the slices of bread
8. pick up the slice of bread with the peanut butter on it
9. place it with the peanut butter side down on the slice covered with jelly

It's Peanut Butter Jelly Time!

Take 2

1. Locate jars of peanut butter and jelly, a loaf of bread, and a knife.
2. if an order arrives requesting a PBJ sandwich remove lid from peanut butter jar
3. then remove lid from jelly jar
4. then remove 2 slices of bread from bread container
5. place knife in hand and scoop out portion of peanut butter
6. spread peanut butter on one slice of bread
7. then scoop out portion of jelly from jar
8. then spread jelly on the other slice of bread
9. pick up slices and place the side of peanut butter together with the jelly
10. put sandwich on plate and inform hostess PBJ is ready to serve

It's Peanut Butter Jelly Time!

Take 3

1. Locate jars of peanut butter and jelly, a loaf of bread, and a knife.
2. ...

Lecture 12

Transformis L.L.C.

Mr. Omri Traub graduated from Harvard University in 1998 with a B.A in Computer Science, summa cum laude. Subsequently, as a Ph.D. candidate at Harvard, Mr. Traub did research on algorithms for more effective program compilation and code optimization. His research work has been published in major international conferences on programming languages and computer architecture.

Mr. Traub is a two-time winner of the International Student Research Competition, graduate and undergraduate divisions, sponsored by the ACM—the international organization of computer scientists. For his undergraduate research he received an honorable mention from the Computer Research Association's Outstanding Undergraduate Award, and an honorable mention from the Hoopes Prize for an Outstanding Senior Thesis at Harvard. He is a member of Phi Beta Kappa, a two-time winner of Harvard's Certificate for Excellence in Teaching, and a recipient of a Microsoft Technical Scholarship.

Mr. Traub's work experience is diverse. He has worked in Hewlett Packard's research labs, held a faculty position at the Harvard Summer School, and developed web sites for Harvard's IT division.

In September 1998, Mr. Traub founded Transformis L.L.C. to bring the power of XML technology to web developers. Transformis released the first Web development environment for the Extensible Stylesheet Language, entitled Stylus, in June 1999. He currently works at Liquid Machines Inc., a startup based in Lexington, Massachusetts, delivering data security software.

Lecture 13

Dotcoms

"As an ailing economy reduces high-flying Internet companies around the country to bankruptcy, acclaimed documentary team Chris Hegedus, D A Pennebaker and newcomer Jehane Noujaim take a behind-the-scenes look at the volatile start-up phenomenon, chronicling the turbulent development of govWorks.com, an award-winning Internet site that facilitates interaction between local government, citizens and businesses. Turning a familiar headline story into a high-pressure personal odyssey, Startup.com follows the trials of partners Kaleil Isaza Tuzman and Tom Herman, best friends since childhood, as they progress from being rookies with only a business plan to assuming the leadership of a nationally recognized Internet company struggling to survive an inhospitable economy.

With millions of dollars of venture capital at stake, Isaza Tuzman and Herman wrestle with the growing pains of a new business in the fickle Internet community, tackling technical difficulties, chartering the unpredictable venture capitalist waters, and out-smarting copy-cat competition. In one tense sequence, the partners receive a $17 million offer from a venture capital firm that they must sign that day, without leaving the office. There's only one problem: they can't locate their lawyer on the phone. GovWorks.com even becomes the victim of sabotage when its offices are broken into and valuable documents, outlining business and marketing strategies, are stolen. In the end, however, none of these challenges prepares Isaza Tuzman or Herman for their own conflict over the management of govWorks.com., a conflict that will not only endanger their company and their jobs, but will irrevocably alter their lifelong friendship.

Picking up where today's headlines leave off, Startup.com examines the current troubled state of the Internet revolution, in which inflated ideals and dreams of instant wealth have been supplanted by harsh economic realities and broken promises. Graced with sensitive storytelling and a dynamic, intimate cinema-verite style, the film also manages to personalize this crisis with intensely private views of the people involved. More than just an insider look at an industry in flux, Startup.com becomes a deft exploration of friendship and the conflict between personal and business relationships."

Lecture 14

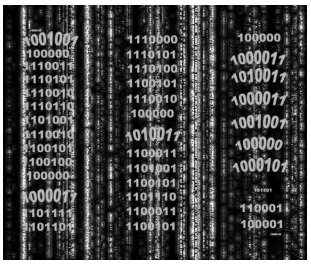
Computer Science

Thank You

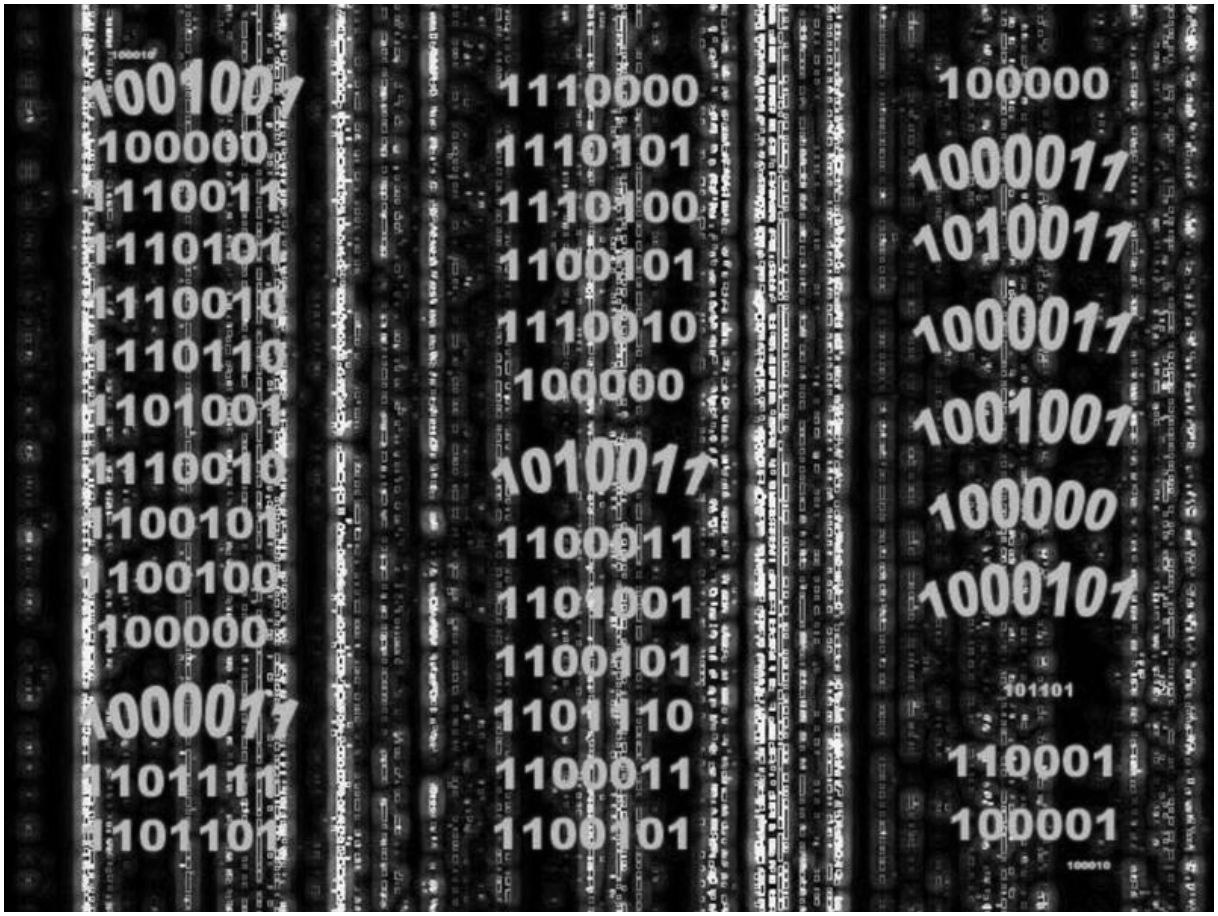
Teaching Fellows

Fall 2005's Mousepad

Fall 2005's Mousepad



And the winner is...



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