# Overview of Programs

Dept. of Computer Science
University of California, Davis
http://www.cs.ucdavis.edu

Professor Norm Matloff
matloff@cs.ucdavis.edu

Hard copy of presentation:
http://heather.cs.ucdavis.edu/ucdcs.pdf

# Computer-Related Majors

- Computer Science (CS):
  Administered by CS Dept., degree in Letters and Science

# Computer-Related Majors

- Computer Science (CS): Administered by CS Dept., degree in Letters and Science

- Computer Science and Engineering (CSE): Administered by CS Dept., degree in Engineering

# Computer-Related Majors

- Computer Science (CS): Administered by CS Dept., degree in Letters and Science

- Computer Science and Engineering (CSE): Administered by CS Dept., degree in Engineering

- Computer Engineering (CE): Administered by ECE Dept., degree in Engineering

# Curricular Comparison

| major | college | software | hardware | freedom |
|---|---|---|---|---|
| CS | L&S | heavy | minimal | lots |
| CSE | Eng. | heavy | strong | $\approx 0$ |
| CE | Eng. | substantial | heavy | $\approx 0$ |

All of these majors have an integrated BS/MS option.

# Which Is Better, CS or CSE?

In terms of jobs prospects for new grads, there is essentially no difference.

# Then What <u>Does</u> Count?

Good grades aren't enough. The following are crucial:

- Co-op/internship experience. Very little chance of even getting an interview for a technical job without this!

# Then What **Does** Count?

Good grades aren't enough. The following are crucial:

- Co-op/internship experience. Very little chance of even getting an interview for a technical job without this!

- "Brazil" — really <u>knowing</u> the material, being able to discuss it intelligently without review.

# Then What **Does** Count?

Good grades aren't enough. The following are crucial:

- Co-op/internship experience. Very little chance of even getting an interview for a technical job without this!

- "Brazil" — really <u>knowing</u> the material, being able to discuss it intelligently without review.

- Good verbal abilities (NOT from taking more English classes).

# UC vs. CSU

- CSU has small class sizes (at UCD, a typical upper-division class is 50 or 60, maybe more).

- At a UC school, you are hearing it "from the source." Most faculty are doing cutting-edge research. They lecture from their own notes, not lecturing out of a textbook.

# UCD CS Faculty Research

"Claims to fame" (large, nationally-known research groups):

- Cryptography/Security

- Graphics

- Networks

- many nationally-known faculty in other fields

As a result, we have a lot of special courses other schools don't have — a 2-quarter UG sequence in networks, an UG security course, a host of UG graphics courses, etc.

# Commitment to Students

- 4 CS faculty have won the campus Distinguished Teaching Award.

- 2 CS faculty have won the campus Best Faculty Adviser Award.

# Guess What

This isn't PowerPoint...

# Guess What

This isn't PowerPoint... We're UNIX users. :-)

# Guess What

This isn't PowerPoint... We're UNIX users. :-)

UCD, like most major universities, is mainly UNIX-oriented.

# Guess What

This isn't PowerPoint... We're UNIX users. :-)

UCD, like most major universities, is mainly UNIX-oriented.

Most computer-related UC grads get jobs in full or partial UNIX shops.

# Linux

Students are strongly encouraged to install Linux on their home PCs:

- Have the same software development environment at school, home.

- Learn lots of valuable system admin skills!

# Location, Location, Location

- "1 hr. to Bay Area, 2 hrs. to Lake Tahoe...UCD is centrally isolated." :-)

# Location, Location, Location

- "1 hr. to Bay Area, 2 hrs. to Lake Tahoe...UCD is centrally isolated." :-)

- Proximity to Silicon Valley means:
  Close relations between faculty and industry.
  Most employers give high preference to locals, since they can drive to interviews.