



# How To Apply To Graduate School in CISE

Lori Pollock, University of Delaware  
Fatma Mili, Oakland University

CRA-W Workshops @ GHC 2011

# The Application Process

C R A  
W



# Deciding Where to Apply



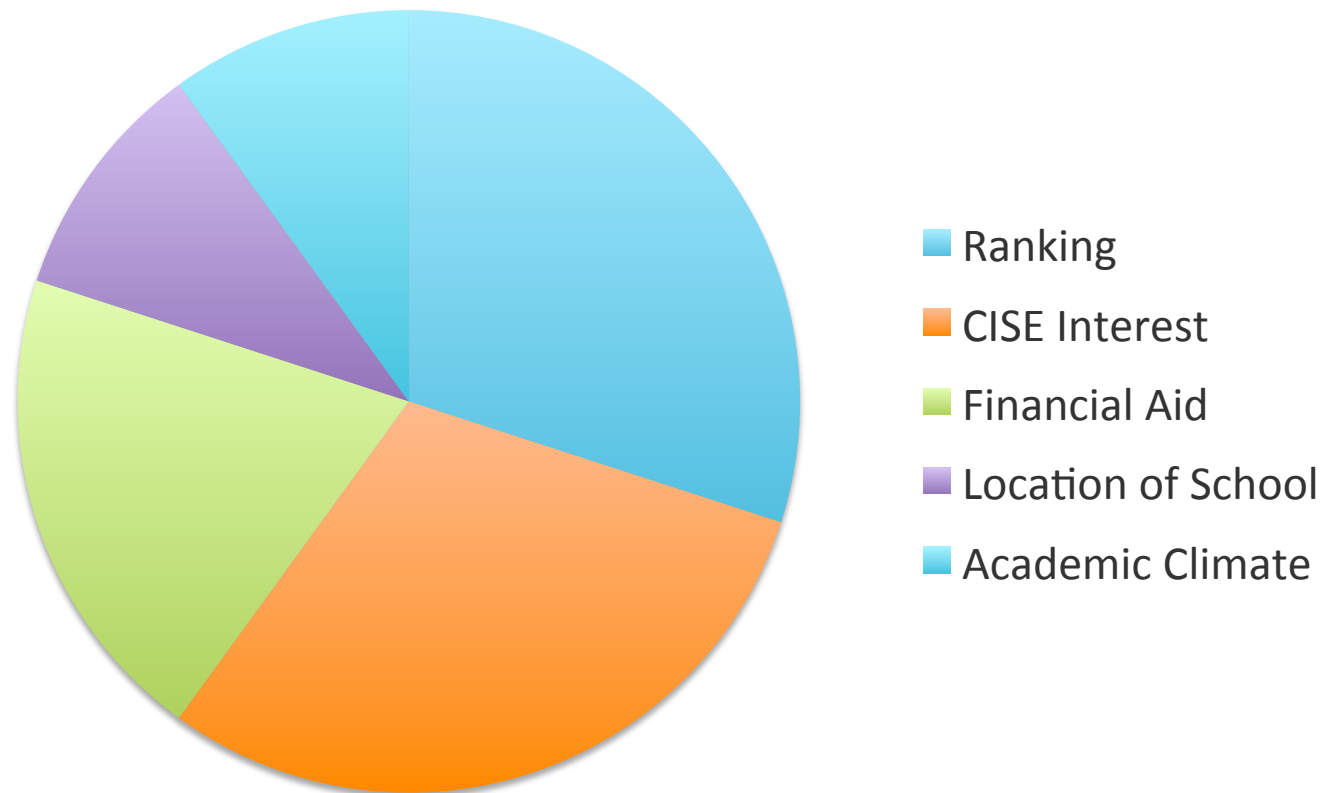
## 5-minute Activity:

1. What areas of CISE interest me?
2. What type of degree am I considering? MS? PhD? Why?
3. What type of academic climate do I want to study in?
4. Do I have any geographic preferences? Restrictions?
5. What are my academic credentials?  
(GPA, research exp, test scores, communication skills)

# Where to apply? Factors To Consider

C R A  
W

Importance to YOU?



# Master's VS PhD



Masters	PhD
2-3 Years	5-8 Years
Courses + Thesis/Project	Courses + Research + Dissertation
More attractive for industry/lab	Minimum for Industry/Lab Research
Minimum for Instructor	Minimum for Academic Position
Not much opportunity to specialize	Become expert in particular research area
Often limited grad study funding	Easier to obtain RA/TA support

# Additional criteria: The intangibles

C R A  
W



JORGE CHAM © THE STANFORD DAILY



phd.stanford.edu

# Another Question to YOU



1 Minute with your neighbor:

Assuming you have decided to pursue the PhD, what do you think is the most important decision you will make DURING graduate school?

# MOST IMPORTANT DECISION DURING GRAD SCHOOL

*Choice of a dissertation advisor.*

So,

Learn about the faculty:

- their areas of interest
- their research records
- their success in mentoring students
- their success in graduating female/  
minority students





# What can I do to increase my acceptance into grad programs?



Activity with your other neighbor:

Create a list of at least 5 actions.

# What can I do to increase my acceptance into grad programs?



- Maintain a high GPA
- Take as many high level courses as you can, particularly within your interest area
- Gain undergraduate research experience
- Participate in internship, preferably in your area of interest
- Create connections with qualified, respected faculty

# Increasing your chance of acceptance continued



- Seek strong recommendations from qualified, respected faculty
- Take GRE subject test early so you can retake
- Apply to multiple schools of various rankings
- Apply as a PhD student rather than an MS student

# Preparing Application Materials



EVERY program is different, but most want:

- Application (basic contact info)
- Transcripts
- Letters of recommendation (2-3)
- Statement of Purpose (Goals/Research/Intent)
- Resume
- Test scores (GRE, TOEFL / IELTS)
- Fee
- Deadline!

# Engaging Letter Writers



Typically 3 letters.

- **Who?**

“Would you be able to provide a positive recommendation?”

Research advisor, teacher of high level course, employer in CISE, REU mentor,

- **What to give them?**

- Transcript, resume, statement of purpose

- Chart of schools, deadlines, how to submit letter

- <http://www.xtranormal.com/watch/7520547/so-you-want-to-get-a-phd-in-theoretical-computer-science>

- **When?**

At least 2-3 weeks before first deadline

# Taking Entrance Exams



- GRE general and Advanced in CS
  - Are they required?
  - What scores are acceptable?
  - Take spring junior/fall senior years
  - Retake if needed
- If non native English speaker:
  - TOEFL, TOEIC

# Statement of Purpose

Activity: Take turns telling Your story to your neighbor.



- Your motivation for grad school
  - Your CISE interests
  - Your professional goals
  - Evidence of potential success:
    - Research experience
    - Relevant accomplishments
- \*\*\*Help Each Other by Asking Questions

originality, creativity, problem-solving ability, inquisitiveness, independence the ability to collaborate, and good writing skills

# Finalizing the Application

- Follow up with letter writers
- Request official transcripts be sent
- Report test scores
- Complete/copy application

**MEET THE DEADLINE!!!**





# Financing Your Graduate Study



- Admission application - 1st Step
- THEN, Apply for financing opportunities:
  - Teaching Assistantships
  - Research Assistantships
  - Fellowships
- Apply for Outside \$\$
  - Grants
  - Fellowships – e.g., NSF Graduate Research Fellowship Program
  - Loans (at banks not through Financial Aid)

# Evaluating Your Offers

## March/April



- Spend time researching programs
- Visit the schools
- Meet faculty in your CISE interest area
- Admission decisions by committee
  - meet more faculty
- Meet current grad students/alumni and ask about their experiences
- Don't attend a school that is great in Cyber Security with no HPC if you want to do HPC (what's HPC?)

# Making Your Decision



- You will probably do well at any of your top choices.
- Make decision and inform ALL schools in timely manner.
- Write thank-you notes to letter writers.
- Look forward and celebrate!!!

# Resources



- CRA-W Graduate Student Information Guide –  
<http://cra-w.org/LinkClick.aspx?fileticket=5vDjo-qHs30%3d&tabid=85&mid=552>
- Graduate School Tips -  
<http://www.gradschooltips.com/>
- “Applying to Ph.D. Program in Computer Science” PDF -  
<http://www-2.cs.cmu.edu/%7Eharchol/gradschooltalk.pdf>