A Perspective on Graduate School

Tsu-Jae King
EECS Department, UC Berkeley
tking@eecs.berkeley.edu
Why Graduate School?

• An advanced degree can lead to a more desirable engineering position
  - specialization in area of interest

• A Ph.D. is generally required for
  - R&D positions, high-level technical positions in industry
  - leadership or advisory positions outside of industry (e.g. government)
  - university faculty
MS or PhD?

• MS Degree
  - Emphasis is on coursework
  - 1-2 years

• PhD Degree
  - Emphasis is on research
  - 4-6 years (usually includes MS)
    → self-motivation/drive needed to succeed!
Prepare in Advance

• Coursework
  - Selection is important
  - ~3.7/4.0 GPA is cut-off for top-tier schools

• Research
  - Plan ahead (courses, independent reading)
  - Dedicate significant effort (>10hr/wk)

• Internships
  - Can provide useful experience & perspective
The Application Process

- **Tests (GRE, TOEFL, etc.)**
  - Quantitative & Analytical test scores should be good (>90th percentile)
  - Verbal test scores should be adequate

- **Recommendation letters**
  - Faculty references carry more weight

- **Statement of purpose**
  - should be coherent

- **Other relevant information to include**
Make Yourself Stand Out

• Contact professors for whom you’d like to work in graduate school

• Get meaningful research experience
  → publications and/or patents
  ▪ Do research for a professor at a school where you’d like to go for graduate study

• Secure a scholarship/fellowship
  - NSF, Hertz, NDSEG, DOE, ...
The Admissions Process

• Applications are reviewed by faculty in your stated primary area of interest

• Competition is against other applicants, for a limited number of slots
  - This year, less than 7% of applicants were admitted into UCB EECS graduate program

• All admission decisions are made by committee
How to Decide?

• Visit the candidate schools
  - Talk to professors and graduate students

• Consider the reputation of the program and the faculty
  - Leadership and vision for cutting-edge research is important for PhD education

• Clarify details of financial aid offers
  (TA, research assistant, fellowship)
**Historical Admission Trends**

**Electrical Engineering**

- **apps**
- **admits**
- **accepts**

![Graph showing historical admission trends for Electrical Engineering from 1994 to 2004. The highest number of applicants in 2002 is marked as 1341.]
Enrollment Statistics

ENROLLMENT

# PhD's AWARDED
Time to PhD Degree

MEDIAN # OF SEMESTERS
IN PhD PROGRAM

CURRENT STUDENTS

EE (332 total)

CS (252 total)