

**CRA-W 2016**  
**Mid-Career Professional**  
**Development Workshop**

**Promotion to Full Professor**

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# Outline

- Poll / Question
- Introductions: our career paths
- Institutional perspectives differ
  - research, teaching, service expectations
  - process and guidelines
- Increasing the probability of promotion
- Opportunities, challenges, and strategies
- Breakout Session

# Margaret's path up to Full

- 1994 PhD Stanford
- 1994-present: Princeton University.
- 2000: Promotion from assistant to associate
- 2004: Promotion from Associate to Full
- 2010: Switched from EE to CS as my main home dept.
- 2012: Endowed Chair
- High-profile research (and understandable to the public)
  - Wattch
  - ZebraNet
- Lots of PCs/Co-chair
- Out of the box sabbaticals
  - IBM
  - UW
  - State Department
- External Recognition and Awards: IEEE, ACM Senior member -> Distinguished Member -> Fellow

# Ayanna's path up to Full

- 1999 PhD USC
- 1994-2005 Researcher at JPL
- 2005 transition to Assoc. Professor at GT (tenure-track)
- 2009 Tenure
- 2012 Full at GT, Professorship
- 2013 Founded startup company
- 2015 Endowed Chair
- Started new initiatives (Robotics Ph.D. program/Chair)
- Larger multidisciplinary projects (NSF/NASA)
- Lots of PCs/Co-chair
- Lots of new educational outreach initiatives (with funding – foundations/NSF)
- High-profile research (i.e. understandable to the public)

# Paths up to Full

- There is not “one” path ...
- Institutional perspectives differ
- Stay true to yourself !

# Criteria for Full Professor

- Institutional perspectives differ ...
- But all require *Leadership* role :
  - in research
  - in teaching
  - in service

# Criteria for Full Professor

*Mostly, leadership role*

- in **research**
- in teaching
- in service

Why ?

- External visibility

But :

- Exceptions exist

# Criteria for Full Professor

## *Leadership* role

- in research
- in teaching
- in service
- **What's your passion?**
  - Course innovation, curriculum design, etc.
    - CS is a big tent
  - Societal problems: make the world a better place
  - National & public science outreach
- **You have tenure. Take advantage of the freedom!**



# Typical Procedure

- No deadline
- Faculty member initiates
- Department Chair & Dean = gatekeepers
- Otherwise the same process as tenure
  - extensive curriculum vitae: research, funding, impact, visibility
  - statements
  - external letters
  - multiple measures of teaching and service

# Nuts & Bolts

## Figure out local expectations

- **Institutions differ in expectations : understand yours**
- Read recent cases
- Serve on promotion committee (to see what matters)
- Develop local mentoring from respected senior professors
- Stay balanced in those aspects that “count”
- **Be aware : Non-stationary criteria ... !**

# Nuts & Bolts

## Research Leadership

- Choose important & challenging problems
- Publish in the top venue(s), as much as possible
- Fund your research with a variety of sources
  - Consider topics tackled vs. funding source
- Balance your research portfolio
  - Continue successful directions (in important areas)
  - Choose some new areas: re-invent yourself
  - Consider some high impact (and perhaps high risk)
- **You have tenure. Take advantage of this freedom!**

# Nuts & Bolts

## Research Leadership

- Carve out a leadership role in (some) collaborations
- Say yes to some (**not all !!!**) grant panels, PCs, chair PCs, ACM committees, editorial boards
  - **When you accept, do a good job!**
- Organize a workshop at main conference
  - **Better yet, carve out a new (even if small) area**
- Be a presence
  - Cultivate senior researchers: give talks to senior person
  - Go to the “conference” every year, regardless of papers
- Mentor junior faculty, mentor & place your students well

# Nuts & Bolts

## Teaching Leadership

- Innovate courses that need it
  - Document what you do, who uses your course materials, how well it worked
- Curriculum reform is rampant, and it needs to be!
- Heavy teaching loads
  - Show wisdom in the number of new preps you agree to take on
  - Explore opportunities for team teaching when possible
  - Mitigate grading stress
    - Utilize student graders when possible
    - Don't "over grade" assignments

# Nuts & Bolts Service Leadership

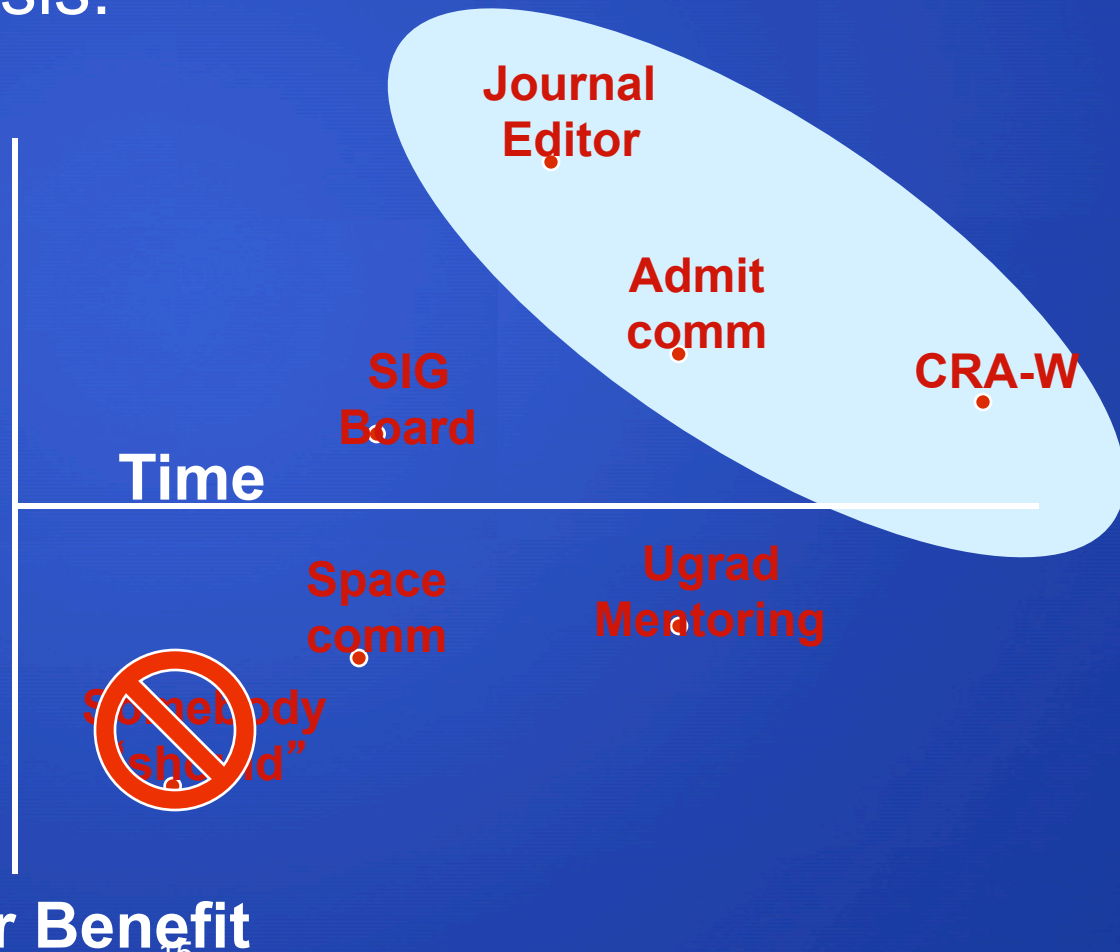
- Nation
  - Discipline
  - University
  - Department
- } Usually impact research  
visibility & leadership
- } Usually impact local life  
collegiality, local love
- Have a theme :
    - mentoring, teaching innovation, research outreach

# Choose Service that *Matters*

- Cost/benefit analysis:

- + better env.
- + visibility
- + connections
- stress
- time
- overcommitted

- Just say “no”  
to the “should’ s”



# Nuts & Bolts

## Keep great records

- **Document everything you do**
  - publications, talks, student committees, department committees, course revisions
  - write it on your extended CV when you agree to do it
  - get letters from committee chair if you do something special
  - Keep track of name of everyone who says nice things about your work
  - file critical letters, emails, etc.
- **Be systematic**
- **Use yearly review (“I am great report”) to maintain and double check your records**



# Nuts & Bolts

## Timing when to move up

- Unlike for tenure, there is no fixed clock
- Typically, it may be roughly 6 years or longer
- Assess if you have a strong case, before going up
- Solicit input from your dept chair and/or senior faculty, who have reviewed recent positive cases
- **KNOW THE FACTS:** Women tend to spend more time at associate professor than their male counterparts.
  - And know that your chair has a motivation to be conservative, against which you may need to push.

# Nuts & Bolts

## When promotion is not successful

- **If not successful, not that much is lost (unlike for tenure)**
- You can always try again (given indicators, that ready)
- **Understanding why failed:**
  1. At departmental level : Constructive feedback ?
  2. At higher level : Did department make good case ?
- **Handling disappointment:**
  1. Don' t take it personal / shrug it off ?
  2. Figure out what went wrong / prepare better ?
  3. Consider leaving / worth the effort ?

# Discussion

- Moving into power without ruffling feathers
- Chair, administration position timing
- Non-monotonic progress
- Non-stationary criteria
- Pace yourself to avoid burn out

# Best Job in the World!!

- Choose things that you enjoy and that matter to you!
- Maintain a positive attitude
  - Learn from your mistakes - you will make mistakes
  - Don't lose heart (or face) if denied promotion the first time up. It occurs more often than you may think
- Maintain perspective
  - Any effort you expend on promotion increases your marketability if you decide to move institutions
  - Make sure you are having fun!