Promotion to the Next Level
(Education)

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• ~17 Lecture-track; 3 Tenure-track Adjunct; 1 Academic Professional

• We cover half of CS UG course credits

• Teach all GT Undergraduate students (Computing Requirement)

• Capstone Program (Junior Design, CS sections of CREATE-X Capstone and I2P)

• Multiple graduate courses (in-person and OMSCS)
Combined enrollments in Georgia Tech’s undergraduate computing programs (CS, CM, CmpE) from Fall semesters 2014-2023
Teaching

Courses and Sections Counted by School of Instructor in 2022-23 (Fall & Spring)

SCI: 113
CSE: 43
CS: 10
CSP: 10
IC: 35
External (IMTC, ME, EI2, etc): 12

SCI teaches the most sections and largest number of CoC courses.
Pedagogical maturity and leadership

- Scope
- Excellence
- Curriculum development

Research maturity

- Intellectual impact
- Research with students

Leadership and service

- Service to the department and college
- Community leadership
Promotion at NC State, a Research-Focused univ.

Teaching
• Excellence, continual improvement
• Novel curriculum development
+X What makes you stand out?
• E.g. Course / capstone coordination, ABET, tech for teaching

Service to students / outreach / dept
• Undergraduate research, student organization advising, summer camps, K12 outreach

Leadership and service
• Dept/college/univ or national leadership
Expectations

- Learn the expectations for advancement at your institution.
- What is the expected balance between teaching, research, service, and leadership.
Advancement

• Assistant to Associate with Tenure (in 5-7 years)
  • Typical - Developing quality teaching and mentoring, some level of research, little service

• Associate to Full (anytime)
  • Typical - Quality teaching and mentoring, continuing research, significant service and leadership
Research

• Personal Research
• Research with students
• Research Funding
• Publication
Personal Research

- Have a research program
  - Maintain a portfolio of your work
- Move on from your dissertation topic
- Collaborate with others with similar interests
- Summers can be devoted to research and funding is possible
- Research can be on your teaching!
Research with Students

- Supervising senior research projects is common practice.
  - Individual projects
  - Group projects
- Student mentoring advice
  - Fit the project to the student
  - Find out the students interests and skills, then find a project that suits them
Research Funding

• Internal funding
  • Colleges often have funds for research, Univ level!

• External funding
  • National Science Foundation - CRII, CISE, DUE, EAGER
  • Small grants ($5K) - SIGCSE, Teach Access
  • Industry awards - Google, Microsoft
  • Undergrad research: CRA DREU, NSF REU
Publication

- What are the expectations for advancement
  - Conferences vs. journals
  - What level of conferences or journals
  - What about books
  - What about practice pieces
- What about artifacts
  - Tools and Apps
- Some common venues for education work
  - SIGCSE, ICER, ITiCSE, CompEd, CCSC
Teaching

• Become a master teacher
  • CS is constantly changing; Help other faculty improve
• Pedagogy
  • Regular improvement
  • Teaching the same thing all the time can become stale
• Course development
  • Learn new areas by teaching them, keep curriculum fresh
• Seminars
  • Learn together
Service

The reality

• You will be asked to serve, and serve much more, after tenure.
• You will be asked to not only serve, but lead (chair committees, department, PC, …).
• You are expected to demonstrate leadership.

The questions

• Do I have to do them all?
• How much effort do I have to put in service?
What service?

Local service

- Lead committees within the department
- Mentoring students, junior faculty members, student organizations
- Chair the department

College/University service

- Lead/participate in campus level committees
- Lead/participate in key initiatives
- Connect with national programs

Community service

- Organize conferences, chair program committees, edit/review for journals,…
- Review grants, judge for scholarship, awards,…
- Mentoring students/faculty outside your home institution
- Volunteer for important causes
- …
Leadership

Why?
• Explore large collaborations
• Lead local units, committees, professional organizations

Leadership is a skill
• We are trained computer scientists
• Leadership skills need/should/can be learned
  • Learn on the job
  • Get trained
  • Find a mentor on leadership skills
Beyond research/teaching/service

You are a well-rounded package
• Keep developing your portfolio and resume
• Continuous learning
• Work-life balance

Your environment and network matters
• Understand the expectation and culture of your institution
• Collegiality and networks
Understand your institution

Collect information

• Read carefully the promotion criteria of your department and institution

• Observe how key issues are framed and discussed at all levels

• Ask for input from senior members

• ……

Questions you should ask

• Is there a tradition on the number of years between tenure and promotion?

• What does the dossier consist?

• Does the institution expect outstanding in some areas and good in others? Or a more balanced case?

• Do I need to secure a (or additional) research grants?

• What’s the deal breaker?

• ……
Network, network, network

It takes a community to help you succeed and reach your full potential

- It is both WHAT you do and know and WHO you know.
- Look for mentors, collaborators, and sponsors

Networking 🡪 enhance the WHAT and WHO

- Building and publicizing your brand/reputation
- Becoming aware of new opportunities
- Identifying collaborators
- Learning about new ideas and approaches
- Getting invited to program committees, review panels, keynotes, journal editorship, etc.
Portfolio Development

Examine your resume every few months

- Add new accomplishments
- Reorganize as needed
  - Identify and summarize new research areas
  - Separate leadership positions from employment
  - Separate keynotes from invited talks
- Ask
  - Is there any area I want to strengthen?
  - Is there a new section I want to add?
Work-life balance

I will do …… when I get my tenure

• Tenure sets you up for more responsibilities
• Tenure gives you freedom

Self reflection

• Is my life in balance?
• What are the most important things for me?
• What gives me joy?
• What are the stressors?
• ……

Some thoughts

• Time management
• Trade-offs
• Boost self-confidence
• Make time for yourself

Say NO to …… and say it firmly.

Say YES to what you are passionate about and DELIVER!
To move or not to move

Why you want to stay?
- Familiar environment
- Established networks
- Family stability
- ….

Why you want to move?
- Pursue a better fit and opportunity
- New environment, new networks
- Family reason
- ….

When is the good time?
- Whatever is right for you (and your family)

Some thoughts
- Don’t immediately say yes or no to opportunities, think, evaluate, try,…
- Ask for advice
- Work with your family
- Negotiate
- Adjust
It is a journey

Life is a journey ……

… not a destination.

… that must be traveled no matter how bad the roads and accommodations.

… with problems to solve and lessons to learn, but most of all,

experiences to enjoy.

… travel it well
Thanks.

Questions, please.