

Pitfalls and Possibilities at Teaching-oriented Schools

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My Path

- My perspective
 - Small, teaching-oriented schools
 - The pretenure job switch
- Mills College (95-98)
- Mount Holyoke College (MHC) (03-06)
 - The two-body problem
 - Mentorship opportunities
- USF (06-present)
 - Not in Tampa, not a UC, and not a state school
 - Started as a sabbatical replacement
 - Snuck in the back door
 - Will apply for tenure next fall

Types of Schools

- The Carnegie Classification

 - Doctorate-granting institutions (“Research 1”)
award a certain number of doctoral degrees

 - Master’s Colleges and Universities

 - award a certain number of master’s degrees

 - Baccalaureate Colleges

 - primarily undergraduate

 - liberal arts - award a certain number of degrees in liberal arts fields

- Small vs. large

- Private vs. public

- Jesuit (huh?)

Teaching/Research/Service

- R1

 - 15/80/5 (estimate)

 - Need research \$\$\$ and publications

 - “Teaching can hurt you, but it can’t help you.”

- MHC

 - 50/40/10 (estimate)

 - You must be a great teacher

 - Research \$ is good, publications are necessary

- USF

 - 33/33/33

 - You must be a great teacher

 - Research \$ is good, service is required, publications are necessary, but *professional development* is broadly defined

Teaching

- **Load**
 - 2/2 or 2/2/2/3
 - Course reductions for service, research
 - Small classes (too small can be bad)
- **Breadth of courses**
 - Networking, Algorithms, CS1
- **Teacher, mentor, or both?**

Research

- You do the work yourself
 - No PhD students
 - Maybe help from undergrads (or MS students)
- Resources
 - Limited funding from school
 - Limited admin support (admin assistants, grants people, sysadmins)
 - Grants and the NSF
- Quality versus quantity
 - But, what is “high quality” research
- Rule of thumb: 1 publication/presentation per year
 - But no one will admit to this!

Research Models

- Focus on teaching
 - Write a textbook
 - Probably not enough for tenure
- Work with students
 - Lower quality publications with undergrad authors are OK
- Find collaborators
 - Nearby research schools - adjunct positions
- Do something else part time
 - Google/ILM
- Do your own thing
 - Produce software and write a book about it
- Pretenure sabbatical

Service

- Keeping the department afloat
 - You will be chair, maybe before tenure
- Committees
 - Checking all of the boxes
- Typically, less professional service
 - NSF review panels
 - TPC work
 - Paper reviewing
- SEP, Peru
 - Unique opportunities at USF

A Side-by-side Comparison

The good	The bad
<ul style="list-style-type: none">▪ Serve as mentor, not just teacher▪ Provide students with foundation for research career	<ul style="list-style-type: none">▪ Must love teaching
<ul style="list-style-type: none">▪ More research freedom	<ul style="list-style-type: none">▪ Little support▪ Undergrads aren't PhD students▪ Hard to go back to R1
<ul style="list-style-type: none">▪ Service counts	<ul style="list-style-type: none">▪ More administrative responsibility▪ Service impactful for department or college, but maybe not the field

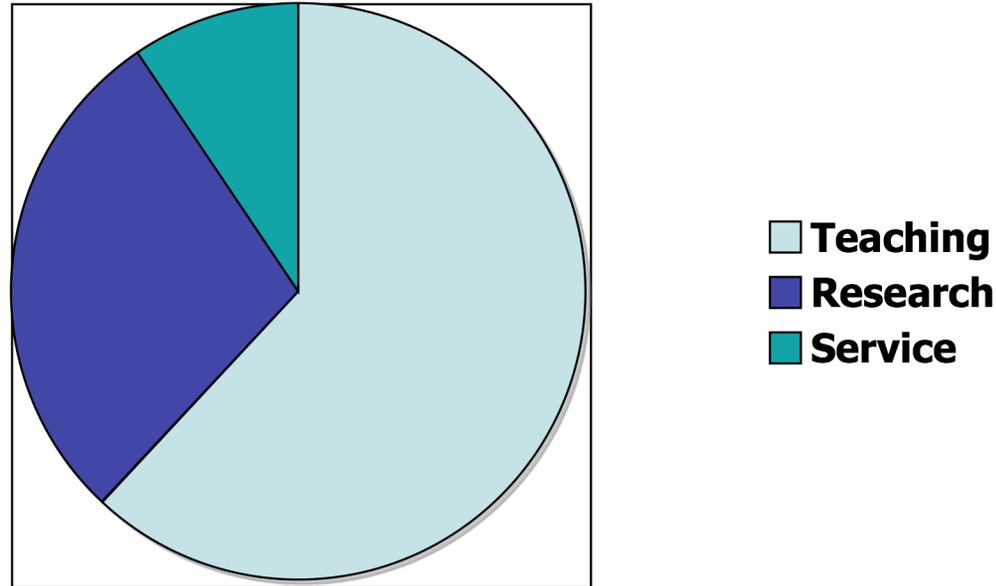
Nuts and Bolts

- Getting your application noticed
 - Teaching experience is good, but not necessary
- The interview
 - Teaching a class
 - Potential for working with students
- Salary
 - 57K (+ 3K), 66K, 86K
- Startup funds
 - 40K, 15K (+ some other perks)
- Space
 - They will always say its not possible
- Summer salary - good luck!
- Course release time
 - Varies

Other Lessons

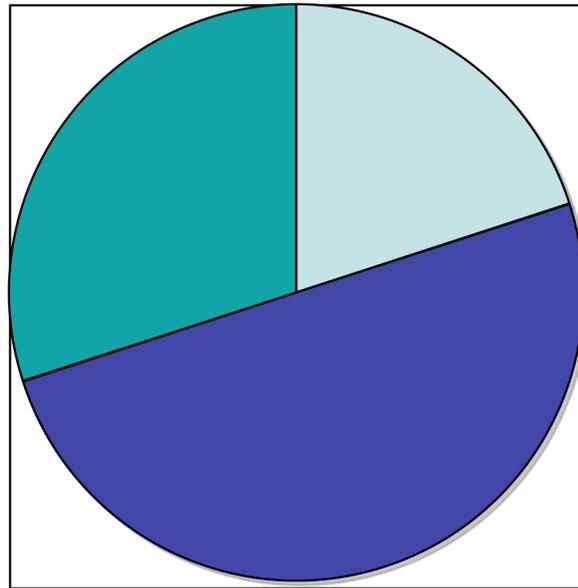
- Change is good
- Location, location, location
- You can't do it alone
- Aim high

Day-to-Day Life - Academic Year



- **Teaching**
WSN and CS2
- **Research**
CollaborateCom paper, new cell phone project, data collection tool
- **Service**
Curriculum changes, department meetings, committees, SEP and funding, WiCS

Day-to-Day Life - Summer



■ Teaching
■ Research
■ Service

- Teaching
 - Depends on whether I am preping a new class
- Research
 - This is when you get things done
- Service
 - The Summer Enrichment Program

Summary

- Teaching schools aren't for everyone, but you may fit in better than you'd expect
- Questions?

My Post-PhD Record

Publications

- S. Rollins and C. Chang-Yit, "A Battery-aware Algorithm for Supporting Mobile Collaborative Applications", in Proceedings of The 4th International Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom '08), Orlando, FL, November, 2008. (to appear)
- N. Banerjee, A. Rahmati, M.D. Corner, S. Rollins, and L. Zhong, "Users and Batteries: Interactions and Adaptive Energy Management in Mobile Systems", in Proceedings of the 9th International Conference on Ubiquitous Computing (UbiComp 07), Innsbruck, Austria, September, 2007.
- N. Banerjee, J. Sorber, M. D. Corner, S. Rollins, and D. Ganesan, "Triage: Balancing Energy Consumption and Quality of Service in a Microserver", in Proceedings of The Fifth International ACM/USENIX Conference on Mobile Systems, Applications, and Services (MobiSys '07), Puerto Rico, June, 2007.
- D. Tilkidjieva, N. Banerjee, M. Kazandjieva, S. Rollins, and M. Corner, "LLAMA: An Adaptive Strategy for Performing Background Tasks on Mobile Devices", in poster proceedings of the 7th IEEE Workshop on Mobile Computer Systems and Applications (WMCSA 2006), Semiahmoo Resort, WA, USA, April, 2006.
- J. Sorber, N. Banerjee, M. Corner, and S. Rollins, "Turducken: Hierarchical Power Management for Mobile Devices", in Proceedings of the Third International Conference on Mobile Systems, Applications, and Services (MobiSys 05), Seattle, WA, USA, June, 2005.
- S. Rollins and K. Almeroth, "Evaluating Performance Tradeoffs in a One-to-Many Peer Content Distribution Architecture", Journal of Internet Technology, Volume 5, Number 4, pages 373-387, 2004.
- S. Rollins and K. Almeroth, "Lessons Learned Deploying a Digital Classroom", Journal of Interactive Learning Research, Volume 15, Issue 2, pages 169-185, 2004.

Grants

- P. Shenoy, D. Ganesan, M. Corner, S. Rollins, S. Kaplan, "MRI: Acquisition of a Laboratory Testbed for Networked Embedded Systems and Sensor Research", National Science Foundation (NSF) CNS-0520729, \$300,000, 9/1/05-8/31/08.
- S. Rollins, "RUI/CSR-PDOS:Cooperative Prefetching for Mobile Devices" National Science Foundation (NSF) CNS-0509095, \$166,882, 6/15/05-5/31/08.
- M. Corner, B. Levine, S. Kaplan, S. Rollins, N. Howe, R. Weiss, "Collaborative Research: A Five-College Partnership for Information Assurance Education" National Science Foundation (NSF) DUE-0416481, \$11,527 (Mt Holyoke award), 9/1/04-8/31/06.