Leading Initiatives, Building New Programs, Negotiating Skills
Make a Difference!

Part of your job is to make the world a better place.

You get to choose educational, research, and service initiatives that are meaningful to you.
Leading New Initiatives
Research, Teaching, & Service Initiatives

*Improve* some process curriculum, admissions, hiring, conference, reviewing, IEEE, ACM, etc.

*Create* something new
Research Project
University Research Center
Workshop
Undergraduate/Graduate Program
Elements of Success

- Passion
- Clear statement of objective
- Buy-in from stakeholders
- Determine & obtain resources
  - People, time, financial, staff, space,
- Iterate as needed
- When are you finished?
Two of My Initiatives

1. Double blind reviewing
   Improve reviewing process
   Improve my research community

Paper #426
Portable Performance on Asymmetric Multicore Processors

Abstract
Technology constraints on power are steering chip manufacturers to build single-ISA Asymmetric Multicore Processors (AMPs) with big and small cores. To deliver on their energy efficiency potential, schedulers must consider core sensitivity, load balance, and the critical path. Applying these criteria effectively is challenging, especially for complex and non-scalable multithreaded applications. On the software front, managed programming languages are proliferating. We demonstrate that ready in the mobile market [23] and their reach is expected to include desktops and servers. We target desktop and server because their ecosystems are mature, with highly optimized VMs, benchmarks, and profiling systems. Extracting performance from AMP hardware is challenging and complicated by dynamism due to core frequency and voltage scaling, core defeaturing, simultaneous multithreading (SMT) resource contention, and competing applications. Application programmers cannot be required to manage this complexity.
Two of My Initiatives

1. Double blind reviewing
   Improve reviewing process
   Improve my research community

2. DaCapo Research Project
   Dynamic optimization & memory management
   Large 5 year ITR grant
   Faculty & students from 4+ Universities
   Built small research community
Building New Programs
Identifying New Programs

- Compelling Problem
- Unique Capabilities
- Urgency or Opportunity

New Program
SWOT Analysis

**Strengths**
What do you especially well?
Do you have unique people, facilities or expertise?

**Weaknesses**
What are you missing?

**Opportunities**
Funding calls
New people or hiring possibilities

**Threats**
Who else is doing this?
Are key players on board?
Defining and Socializing a Vision

Top-down vision
What you’re going to do and not going to do

Articular vision

Organize and adapt

Bottom-up capability assessment
How do the pieces fit together?
Building your Team

Understand your own strengths

Complementary strengths

Shore up your base before taking on detractors

Avoid the “uninvite” scenario; be aware of budget constraints

Politics should not drive your decisions, but can’t be ignored
Examples

“Big Data” in DOE
- Defining turf
- Getting people on board
- Delegating!

Quantum computing
- Gathering experts
- Identify strengths
- Defining turf
- Finding a leader
Exercise
Initiative Exercise – Pair Up

1. Define an objective
   New Curriculum, Research Project, Workshop, University center, etc.

2. Identify stakeholders & team

3. What resources do you need? How will you obtain them?
   People, time, financial, staff, space

4. Anticipated obstacles? Strategies?

5. Exit strategy (if needed)
NEGOTIATING SKILLS
Negotiating Skills

• Getting the resources you need
• Know what you want
  • Your Wildest Dreams
  • What you need
  • What you cannot succeed without
• Ask
Negotiating Styles

- Collaborating
- Competing
- Avoiding
- Compromising
- Accommodating
Tips

• Do your homework
• Ask questions
• Ask for clarification
• Use silence
• Don’t take it personally
• Thank the other party
Failure

• Your managers are balancing multiple priorities
• Be cheerful, make the end result work
• Be patient, wait, try again later
• Let someone else take the lead
• Move on
Scenarios

1. Your project and responsibilities have grown. You need support staff to assist you. Negotiate with your supervisor.

2. Your supervisor asks you to take on a large new responsibility. You are already running at maximum capacity. Negotiate.

3. Report out
Resources…Or Not

• The Only Negotiating Guide You'll Ever Need: 101 Ways to Win Every Time in Any Situation, Stark and Flaherty
• The Art of War, Sun Tzu
Resources

• Getting to Yes: Negotiating Agreement Without Giving In, Fisher and Ury
• How To Win Friends and Influence People, Dale Carnegie
Notes

- See http://www.isixsigma.com/training/training-materials-aids/change-game-engaging-exercises-teach-change/ for 3 great exercises