

Industry and the Academy

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Goals (Faculty Perspective)

- Have a realistic understanding of the environment in which most of our students will work.
- Have a good story to tell in order to attract bright students to the computing field
- Provide a realistic context for the concepts we teach in order to motivate our students. Made up examples do some of that, but real ones have a greater credibility.



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Realistic understanding of work environments

- Opportunities for faculty to get connected with projects of relevance to you.
 - help the faculty have a better perspective on how the concepts are actually applied and what work is like in your part of the field.
 - help the faculty do a better job of preparing students for the reality of the workplace.
 - Summer “internship” opportunities
 - Faculty projects of a variety of sizes (usually including money to support student workers at the university)



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Understanding the environment

- A variety of student internship models (summer work, PT during the school year, on-campus project work, etc.)
 - Students share their experiences with the faculty and other students



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A good story to tell

- How can we work together to get the word out that computing careers are
 - Fun
 - Creative
 - Exciting
 - Rewarding
 - Opportunities to do good things for the world and society



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Realistic Context

- Video file of a speaker on a technical topic of particular interest to you.
 - Perhaps a specification of a problem and its eventual solution.
 - Maybe just a statement of some problems of interest?
 - Something that could be used in class to supplement the theory part of a topic with a “real world” connection?
 - Something that could inspire project ideas?



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Realistic context

- Clear respect for foundational concepts, less emphasis on a particular platform or package.
 - Some companies are good about this, others are short sighted

Realistic context

- “Heads up” about emerging technologies and domains of interest that should influence preparation of students
 - The perceived influence of changes in architecture on ordinary application development.
 - Growing importance of text and data mining for a large segment of the industry
 - Etc



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Realistic context

- Provide access to materials that only you have
 - Old interview questions?
 - Internal tech talks on interesting topics
 - Conference papers on a variety of topics of interest to you



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Some actions

- Be where people will see you and hear about what is important to you
 - Conferences of various sorts, including education oriented meetings as well as research conferences
- Participate
 - Curriculum committees
 - Accreditation
 - Various activities, including NSDL, that try to enhance computing education



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A general note

- Look to a wide variety of colleges and universities
 - Large and small
 - With and without doctoral programs
- Keep the faculty connected with what you need
- Cast your net wide when looking for talent and excitement in graduates
- Thank you for the opportunity to be here.



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