Updates to the 2012 GIST Observations Report
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1.   What are the major factors in your discipline that are currently shaping its long term, strategic evolution?

The IS/IT field is undergoing rapid change: while traditional types of jobs and opportunities still exist; major growth and major opportunities are associated with several emerging fields:

1.   Social computing and social systems are among the most popular topics of research, practice, and IPO. Essentially, several kinds of technologies/systems have been developed and are being integrated into our lives and industries.
2.   Mobile computing: mobile devices of all kinds now dominate over more traditional computing platforms. This gave a push to a range of new technologies and dictated new workforce demands. Many of our recent graduates have gone to work in mobile application development.
3.   Big Data finally emerged as a topic and a profession in both industry and research. This will cause new demands and expectations of the workforce, as well as substantially new opportunities
4.   Accumulation of personal data (associated with (1) and (2)) has become another opportunity to leverage (e.g., personalization, recommenders) and another threat (e.g., privacy, access) to be concerned about. A good proportion of Big Data research and practice is related to processing user personal data and user traces.
5.   IT has finally provided a major impact on education through so-called MOOCs. Finally, what we are doing might impact our own jobs
6.   Recent economic developments in China have created a growing middle class that can afford to educate their children in the US.

2. What is the impact of these factors? Why are they so important? What difference do they make?

1.   In a global sense, IT makes a larger and larger impact on society as a whole and on individual people. Social and mobile technologies have remarkably expanded the proportion of people who engage considerably with IT in their daily lives.
2.   New technologies have resulted in a major new boost to the IT field, comparable with the original Web surge of the mid-1990s.

3.   How do these factors affect the future of SIS and your program?
1.   Research on IT/IS is becoming increasingly important in the context of the overall national research agenda. It is also the area that provides a

good return on investment – an increasingly large fraction of US wealth is generated by IT companies. In the long term this has the potential to yield a relative increase in funding.

2. IT/IS is becoming more visible across the population. Jobs in this area are, once again, becoming more visible and attractive. In the long term, it should create increased interest in IS/IT among high school students.

3. The aforementioned technologies have created substantial opportunities for IT jobs. Despite outsourcing and the broader employment challenges, the demand for IT professionals is high, with demand generally exceeding supply. However, not all schools will get an equal share of new students and not all skills and all jobs will be equal. Leveraging this trend is a two-sided challenge – marketing our programs and also continuing to reshape them to prepare students for the new kinds of jobs.

4. The full potential of jobs in these new fields has not yet been recognized in the local market. Perhaps due to a lack of proper advertising, the fraction of US students in our IT graduate program is decreasing, while the number of Chinese students has increased remarkably (but this trend is hardly unique to Pitt).

4. How can the School respond most effectively to these factors?

In order to maintain the ability to conduct relevant research and to educate students for meaningful roles in society, we must promptly react to emerging trends in both our research directions and our curriculum.

1. Emergent topics should be among the priorities for new faculty hiring

2. The research of current faculty should consider new trends as much as possible. While it is hard to impact what faculty do for research, we can still do something. Organizing colloquia on the topic that connects current research with new topics can inspire new ideas and collaborations. Better information about external talks and meetings on these topics can provide a similar effect. Other options include travel grants to important meetings, encouraging collaboration with proper partners, etc.

3. Program curricula should be updated to include new trends and to develop knowledge and skills that are required by new kinds of jobs. New courses and specializations should be offered and promoted, while inadequate or outdated ones should be retired.

4. On both the research and teaching fronts, we should encourage collaboration with industry that is a major driving force in the new wave of technologies. Students should be encouraged to take industrial internships. Faculty should also be encouraged to collaborate with industry, visit industrial labs, and apply for industrial funding. Sufficient advance research of corporate interests and capabilities needs to be available in order to guide both faculty and students' search for industrial collaborations.

5. Industry representatives should also be hosted more frequently at SIS. We need more speakers (a regular series showcasing leading local

enterprises?), more adjuncts, and better connections with alumni in industry

6. Despite a large increase of student body, we need to pay special attention to attracting students. Our main priority should be in attracting local students. This is important for rebalancing the program and to provide a more sustainable source of students. We need to explore more attractive offerings (like 5-courses CAS), pilot online courses for professionals who have issues with traveling to Oakland and reach businesses that need skills that we teach. At the same time, we should work on sustaining and improving the flow of students from China.

5. Who are the necessary partners that would need to be engaged in order to respond effectively?

Partners for curriculum development should include more recent graduates (less than 10 years out, 5 years is ideal) and (other) project managers from industry. Research partners could come from peer institutions or industrial labs -- preferably forward-thinking labs. Effectively engaging corporate partners routinely continues to be a challenge, and we are not good at it yet.

We also need to engage the best Chinese universities to leverage this new market.

6. What would an effective response look like and what difference would it make?

Listing all ideas – including those mentioned above:
1. strategic hires of faculty in key areas
2. internship coordination - part-time or full-time manager of industry connections including internships and placements
3. more industry faculty – professor of practice and adjuncts
4. organized presentations at Chinese universities showcasing our program. Use our past visitors, graduates, and faculty.
5. promoting new specializations on all levels from BSIS to MSIS to CAS to PhD
6. better promoting new areas through in-house research talks: prefer new topics talks for iSchool series, GIST series, SAIS series. Start industry series focusing on students.
7. encouraging faculty and students to attend talks elsewhere on hot research and industrial topics
8. bringing in visitors and postdocs working on hot topics. Encouraging more faculty to host visitors, provide adequate space
9. encouraging cross-school collaboration on hot topics. Bringing faculty from related schools for joint lunches

10. encouraging higher use of technology in education. Video lectures, tutorials, online problems, examples etc. Showcase best practices