

Vision and Identity Committee

CoChairs: [Martin Weiss](#) and [Janyce Wiebe](#)

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Status

- This is a draft document. Note that *Contextually Situated Computing and Informatics* as a broad research direction is a proposal currently being considered.

Planning Assumptions

- The ability to form multidisciplinary teams will be critical for future research problems
- In ten years, researchers will be engaged in disciplines that they cannot imagine today
- Computing and information will increasingly become more deeply embedded in almost all professions

Goals

- Building on strengths at the University of Pittsburgh, become national and international leaders in multi-disciplinary, impactful research in *Contextually Situated Computing and Informatics*
- Scientists involved in multi-disciplinary projects should innovate without their own disciplines as well as advance the state of the broader effort
- Within one or two broad stroke directions, focus on a key set of multi-disciplinary research efforts that integrate Faculty from the new School together with faculty from various schools at the University of Pittsburgh
- Evolve the current set of research foci over time
- Develop structures that will facilitate true innovation across multiple disciplines
- Form substantial partnerships with industry and government organizations
- Recruit and retain top faculty, graduate students, and undergraduate students
- Be a center of gravity in Contextually-Situated Computing and Informatics that will support and drive truly multi-disciplinary research projects, attracting substantial involvement of faculty from various disciplines at the University of Pittsburgh

- Develop innovative graduate education programs that will provide students with the cross-cutting background knowledge and expertise needed to have successful careers in academia, research, and government
- Exploit increased strengths to enhance undergraduate education
- Break from traditional structures adopted by the university, and serve as a test bed to develop innovative ways to structure and conduct academic organizations. The goal would be flexible, agile structures.

Vision and Identity (*one proposal*)

A new era of computing is emerging which requires computing contextually situated. Computing & Informatics and domain areas need to work directly with one another. Domain scientists and educators require deep understanding of what computing can provide, and computing scientists and educators require deep understanding of what is required by the domain in processing the data.

Our vision is a new unit with *contextually-situated computing* as the broad stroke direction for research and education. It will touch upon computing throughout the University. It will allow CS/IS and relevant disciplines to leverage expertise in computing and domains accelerating both to achieve more impact than could be done separately. It will require new programs and ways to enable effective and direct interaction between CS/IS and domains.

Research and education programs will need to be cross cutting between academic and research units at the University of Pittsburgh, with creative incentives and mechanisms to enable deep collaborations.