Do you have an interest in:
- How people interface with computing systems?
- How to evaluate an interface?
- What is there beyond windows, icons, mice, pointer interfaces?

**OVERVIEW:** This course will explore the hardware, software, design principles, and latest research into the interface between humans and computers. Instead of focusing on faster algorithms or newer hardware processors, this course will instead look at how the interface can be a major enabling or hindering factor in system performance. For empirical evidence, see iPods, iPhones, Nintendo Wii, and Windows, where user-centric design makes or breaks billion dollar ventures.

**TOPICS:** Guidelines, Principles, and Theories; Software Tools; Direct Manipulation and Virtual Environments; 3D Interaction; How to Conduct a User Study; Menu Selection, Form Fillin, and Dialog Boxes; Command and Natural Languages; Interaction Devices; Collaboration; Information Search and Visualization.

**PREREQs:** This course welcomes students with a diverse set of backgrounds, including: computer science, math, physics, digital art, engineering, architecture, and psychology. You are expected to have experience with software development and data structures.

A strong background may include: 1) competent programming skills, 2) a desire to build new and wacky interfaces, 3) engineering skills, 4) creativity, and 5) a strong understanding of basic mathematics.

**WORKLOAD:** Students will read and present research papers, create their own interfaces, and conduct their own user studies to evaluate interface efficacy. There is a substantial final project to the course that would be excellent for student portfolios.

Please email me (jpq@cs.utsa.edu) if you have questions about the course, the pre-requisites, or if you just want to toss around crazy ideas!

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**Magic Lens Interface**
http://www.cs.utsa.edu/~jpq/Site/Research.html

**Haptic Interface**

**Virtual Reality**
http://verg.cise.ufl.edu