Research Areas of Interest to Intel

Students' projects should reflect a strong link to the semiconductor and information technology industry overall; i.e., closely related to one or more of the technical areas listed below:

1. Analog, digital or RF design
2. Micro-architecture techniques (multi-core and multithread)
3. Terascale computing
4. System architecture (Hardware and Software)
5. Graphics architecture
6. Human computer interface (Speech, Handwriting, Audio, Vision)
7. Wireless communication and networking
8. Visualization techniques (natural rendering, light field mapping, 3D modeling)
9. Compilers and run-time systems (type-safe language systems, open research compiler)
10. Information and knowledge representation (Bayesian analysis, supply network)
11. Distributed and pervasive computing
12. Pervasive computing: software radio, MEMS radio, MEMS sensors
13. Electronic design automation and CAD Tools
14. Semiconductor package design and test
15. VLSI-CMOS and semiconductor physics
16. High speed signal processing
17. High speed low power design issues
18. Process and yield enhancement
19. Semiconductor tool design
20. Mixed signal logic and circuit design
21. Lithography and dry etch research, including polish, sputter, wet clean, metrology, and diffusion
22. Advanced thin films research
23. Optical modeling
24. Multi and Many core programming

These projects would typically be in the following disciplines:

- Electrical and Computer Engineering
- Computer Science
- Material Science and Engineering
- Chemical Engineering
- Chemistry
- Physics
- Mechanical Engineering
- Industrial Engineering