IT Areas for Investigation

Below is the list of IT areas for possible investigation by our "company". I'll update this list after class on Thursday. With each topic I've listed the area most closely associated with the topic.

From Tuesday August 31st class
1. PCI Express (hardware).
2. Avid identity microchips (security).
3. Quantum cryptography (hardware/security).
4. Augmented reality (software).
5. 65 nm process technology (memory/hardware).
6. Dual-layer DVD technology (hardware).
7. MEMS memory technology (hardware).
8. RAID (error recovery/security).
9. Fault-tolerant computing (hardware/software/security).
10. SMARTS network management (software/hardware).
11. Deployment software (Altirus? – software).
12. Perpetual systems (hardware).
13. Rapid prototyping (hardware/software).
14. Nanotechnology ?? identify specific area of impact.
15. Advanced processors ??DNA, quantum, crystal – need specific area.
16. Genetic computing (hardware/software).
17. Social networking modeling (software).
18. Bio-technology (hardware/software) Need to specify an area of impact.
19. Shipping logistics (hardware/software).
20. Neural networks (hardware/software).

From Thursday September 9th class

1. Vein recognition (security).
2. Multiple-core chip technology (hardware).
3. MRAM – (memory/hardware).
4. Anti-spam technology – bio-chemistry/physics applications (software – algorithms).
5. Fuel cell technology (hardware).
6. Internet over power lines (hardware/software).
7. Nano-lightening applications for cooling (hardware).
8. Tablet PCs (hardware).

9. Advanced Wi-Fi, WiMax (hardware/software).
10. OLEDs – organic LED (hardware).
11. Molecular nanotechnology (hardware).
12. Wearable computing (hardware/software).

<u>Topics from your investigations that weren't mentioned in class – in some cases I've lumped several specific topics into a more general topic for our purposes here, although you will want to investigate the more specific topic.</u>

1. IT Processes – medical information systems (software/hardware).
2. Radio frequency bar-coding and scanning (hardware/software).
3. Neural networks (hardware/software).
4. Scent generating technology – generate smells to enhance internet experience! (hardware/software).
5. Airbag technology for laptops (hardware).
6. Voice recognition/authentication systems (hardware/software).
7. Visual recognition systems (hardware/software).
8. Biomechatronics – merging of robotic machines and the human body (hardware/software).
9. Hardware/chip-based recognition systems (hardware/software).
10. Advanced processors – 64-bit technology (hardware).
11. Biometric security (hardware/software).
12. Data mining – (hardware/software/security).
13. Motion sensing – gesture recognition systems – (hardware/software/security).
14. Blue laser technology (memory/hardware).
15. Data compression technology (hardware/software).
16. E-paper technology (hardware/software).