

CSC 302

Prof. Turner

Summer 2006

Written Assignment #2 – Due Monday, Aug 7 at the start of lecture

You may do this assignment individually, with part of your team or with your entire team.

Choose a system that uses computer control and submit (email or short written note) the system for approval; your system must be unique in the class.

Then

- Describe how the computer is used in the system  
Use a specific case study or product if at all possible.  
If applicable, describe the human tasks the computer replaces.
- Discuss the benefits the computer provides for the system and to society in general
- Discuss disadvantages and problems caused by using the computer to control the system.  
e.g. fly-by-wire computers have refused to give control to the pilot.

The paper must be a least 3 printed pages, written at a WPE level of 4 or above.

Partial List of Computer Control Uses (first come, first served on choices)

1. Building heating/cooling systems
2. Fly-by-wire airplanes
3. Military weapons (many, many choices)  
e.g. Smart bombs, friend or foe systems)
4. Automobiles (several choices)  
e.g. fuel combustion control
5. Building security (e.g. Cal Poly gym)
6. Toothbrushes
7. Toasters
8. Many other household appliances
9. Medical devices (1000s of them)
10. Smart keys
11. Robots (many different applications)
12. Machine tools  
e.g. guitar making example
13. Factory automation systems