

Comp 366/450 - Microcontroller Programming and Interfacing



Programming in the Small
You are in Full Control

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Interesting class ...



- **New** kind of programming
 - **Nothing** between you and the metal
 - C language
- and deal with **Real World**
 - Learn **hardware**
 - **Analog / Digital** and systems concepts
 - Interesting **jobs...**



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Some DON'Ts

Don't think PC

- Add WiFi
- Add Graphics
- Add Keyboard
- ...



Complain about our lovely room

- Don't make a mess
- Don't remove things



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A little about me...

Industry Background

- Voice and data telecommunications, wireless systems and applications, packet switching, network applications, satellite systems
- Research and Development
- Leading large teams of software developers
- Creating new systems (sometimes)
- Global experience (Europe, Asia)
- Hired hundreds of new college graduates

Bell Laboratories, ITT, GTE, USWEST, Motorola

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My Embedded Software Background

Products (aka Applications)

- Voice Data Switches (central office, PBX, open systems)
- Packet Data Switches (X.25, network control, QOS)
- Satellite Communication Networks (testing systems)
- Mobile Phone Infrastructure (CDMA, services)

Specialized Hardware (including processors)

- Custom processors for reliability (and performance)
- Continuously available systems
- Commercial chip processors eventually
- Home grown and OTS operating systems
- Specialized Software Development Tools (languages, simulators)

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