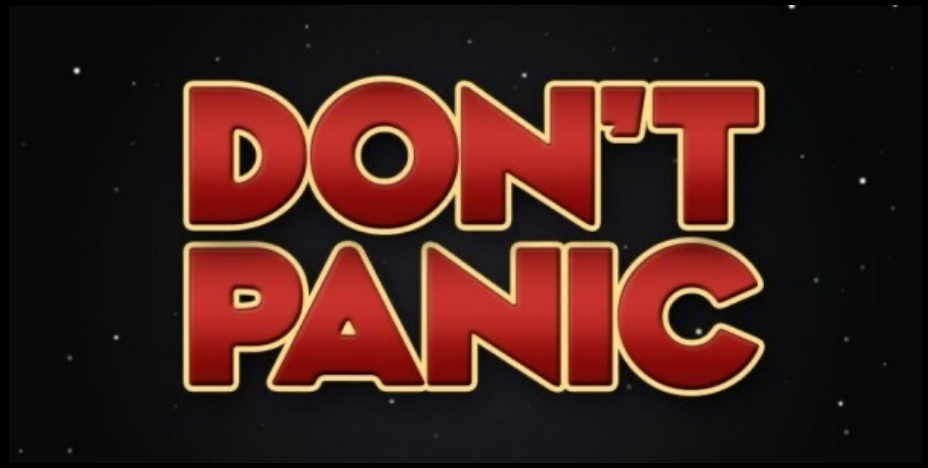
ECE 5725
Design with Embedded Operating Systems
Lecture 1

Prof. Joseph F. Skovira



Schedules

Class: In Person!: M W F, 1:30 – 2:20; Thurston Hall 1:30 – 2:20

Lab: IN PERSON!! Phillips 239
Monday 2:40 – 5:40
Wednesday 4:30 – 7:30
Thursday 4:30 – 7:30

TA lab weekend hours
Saturday, Sunday – 12:00 – 2:00 PM

Office Hours: Wednesday and Friday
2:30 – 3:30

Lab starts week of 9/6: **NO Lab this week**

Canvas / Cornell Box

Staff

Design with Embedded OS

- Design of microcontroller-based systems using embedded Linux.
- Student teams design example solutions on a target microcontroller
- Emphasis will be on
  - Student Developed Applications
  - Linux configuration, features and programming
  - Microcontroller systems
  - External hardware.
- Design Project

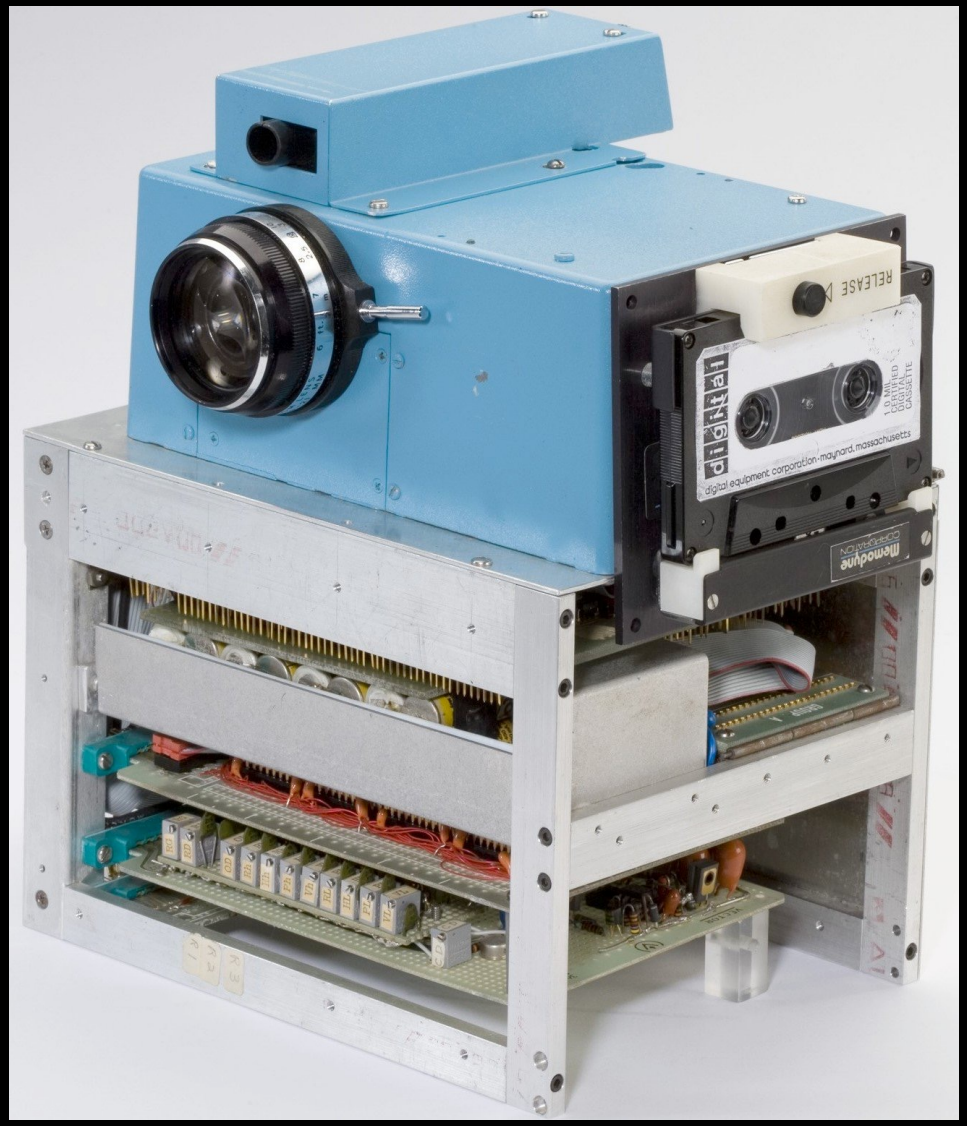
Labs

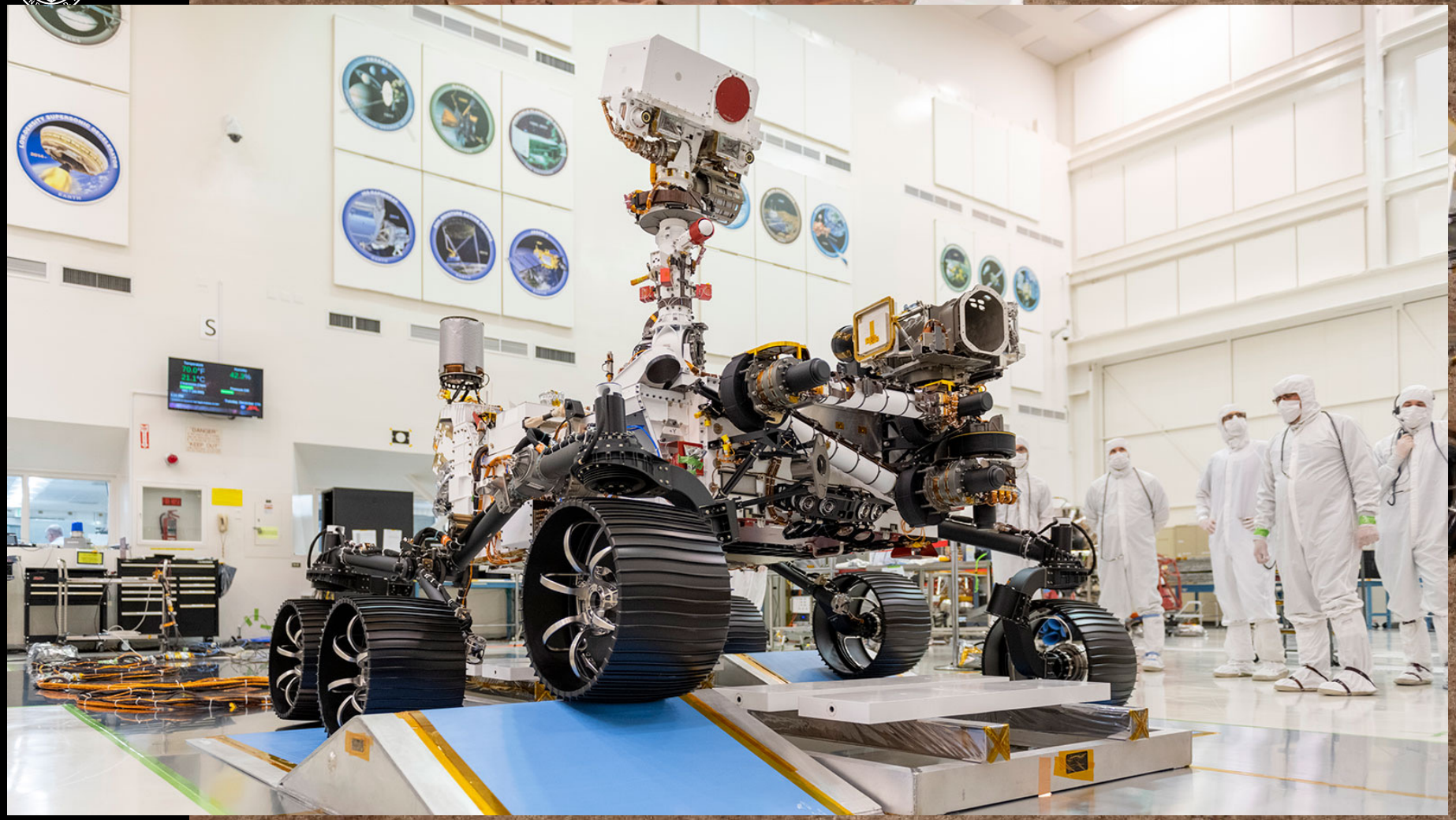
- Linux system installation and graphical I/O
- External I/O including touch screen
- Autonomous motion and control, PWM, GUI
- Linux kernel modification/compilation

The Big Shift

Big Shift

Industry Examples?





How can you identify the 'Big Shift'?

Radical Idea from small group

Community Acceptance

Luck/Karma/Fate

Iterate and Improve Design

FAILURE…..and Recovery

Once Established….Obvious