

February 14, 2012

ENGR110/210

Perspectives in Assistive Technology



David L. Jaffe, MS



Professor Drew Nelson

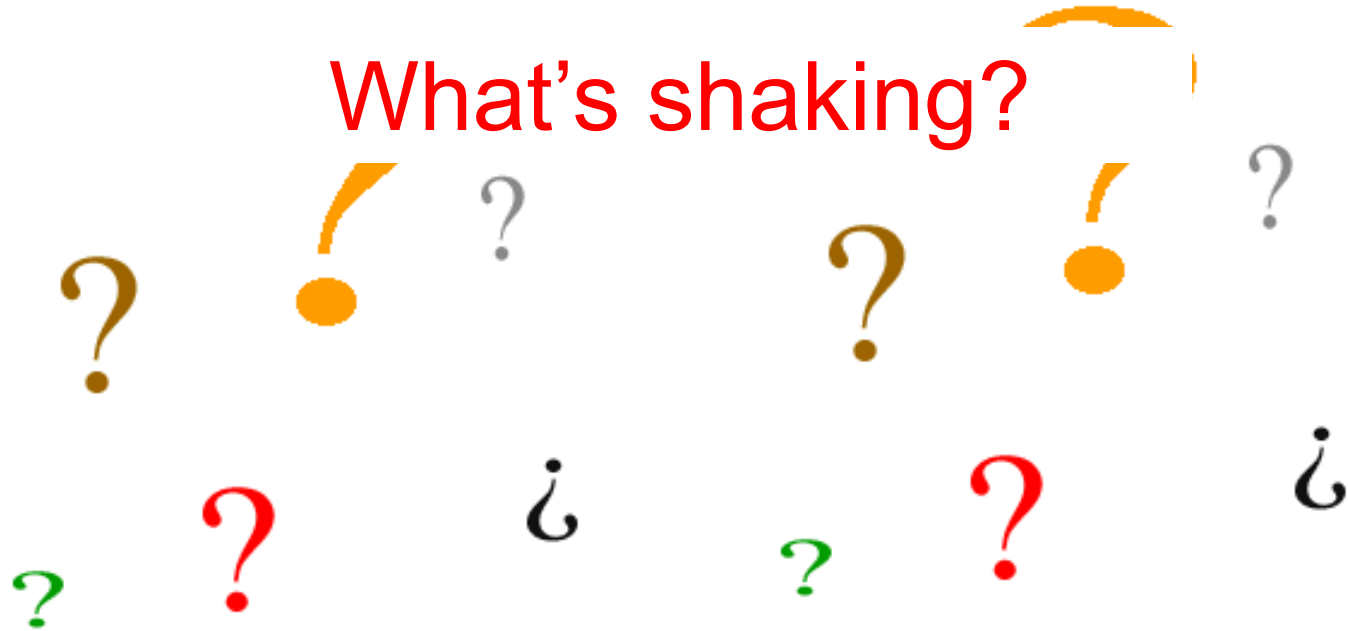


John Thiemer

Questions?



What's shaking?



If you have a car and are planning to drive to any of the three upcoming class tours, please sign the Carpool Driver's Signup Sheet

Tour Events

1. Thursday, February 23rd – Motion & Gait Analysis Lab – Menlo Park
2. Thursday, March 1st – Willow Garage – Menlo Park
3. Tuesday, March 6th – VA Medical Center – Palo Alto

Agnes



“At first glance, it may look like a mere souped-up jumpsuit. A helmet, attached by cords to a pelvic harness, cramps my neck and spine. Yellow-paned goggles muddy my vision. Plastic bands, running from the harness to each arm, clip my wingspan. Compression knee bands discourage bending. Plastic shoes, with uneven Styrofoam pads for soles, throw off my center of gravity. Layers of surgical gloves make me all thumbs.”

Age Gain Now Empathy System

Assistive Technology Boogie



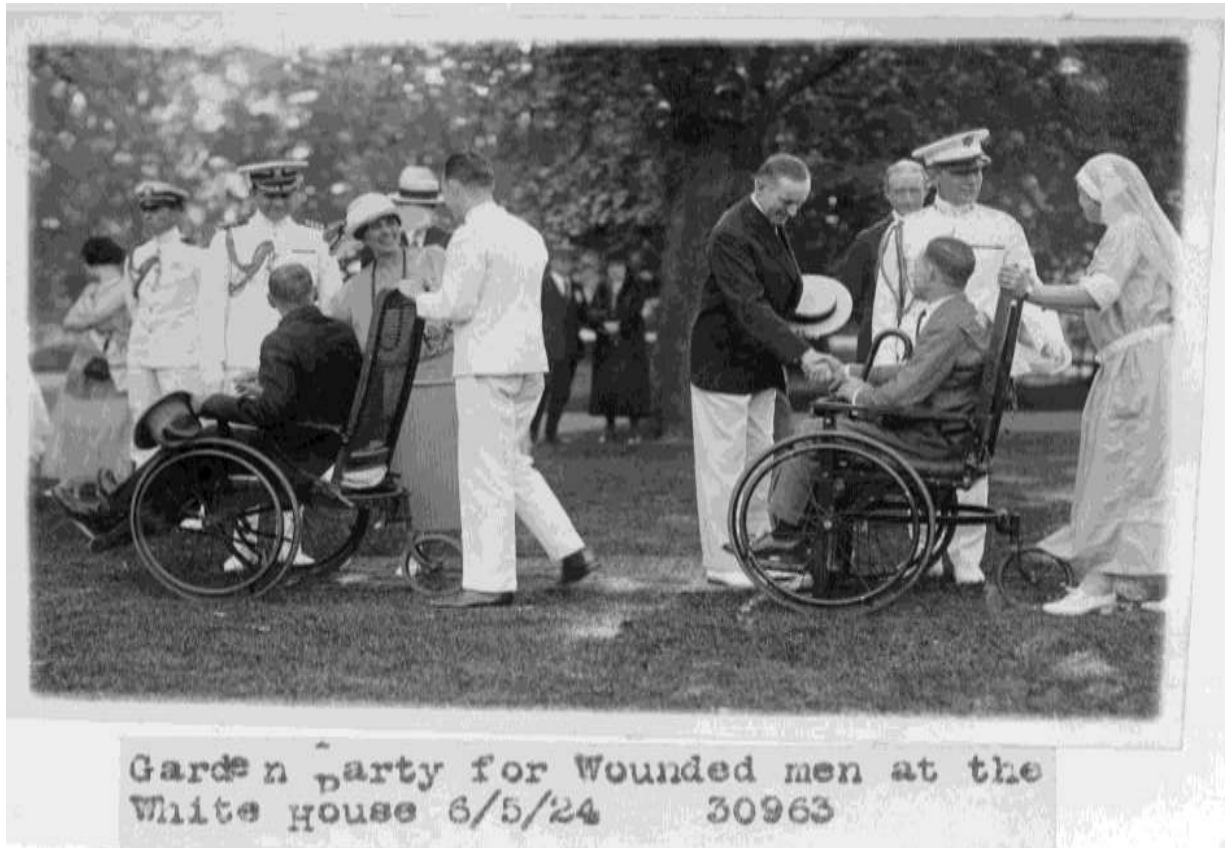
This multi-media production celebrates assistive technology through music and animation with open captioning and audio description. Assistive technology includes the wide array of devices and systems that help people with disabilities accomplish functional tasks including mobility, communication, access to information, and activities of daily living.

“AT Boogie” is the result of collaboration between Jeff Moyer; animator Haik Hoisington; and Jim Tobias, president of Inclusive Technologies, a New Jersey-based assistive technology consulting firm.

Old Wheelchair Designs



Old Wheelchair Designs



Old Wheelchair Designs



Old Wheelchair Designs



Old Wheelchair Designs



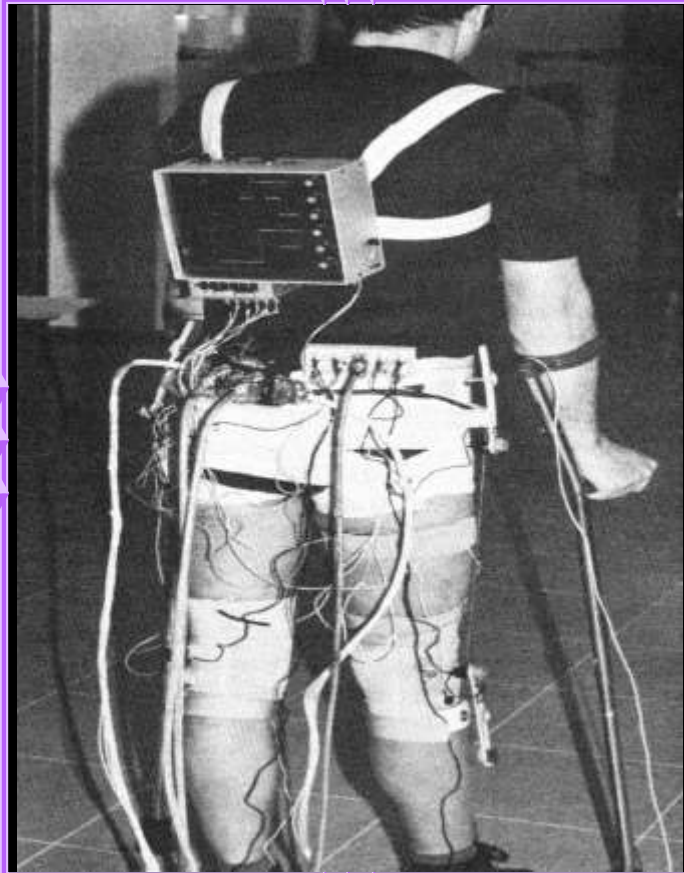
Old Wheelchair Designs



Old Wheelchair Designs



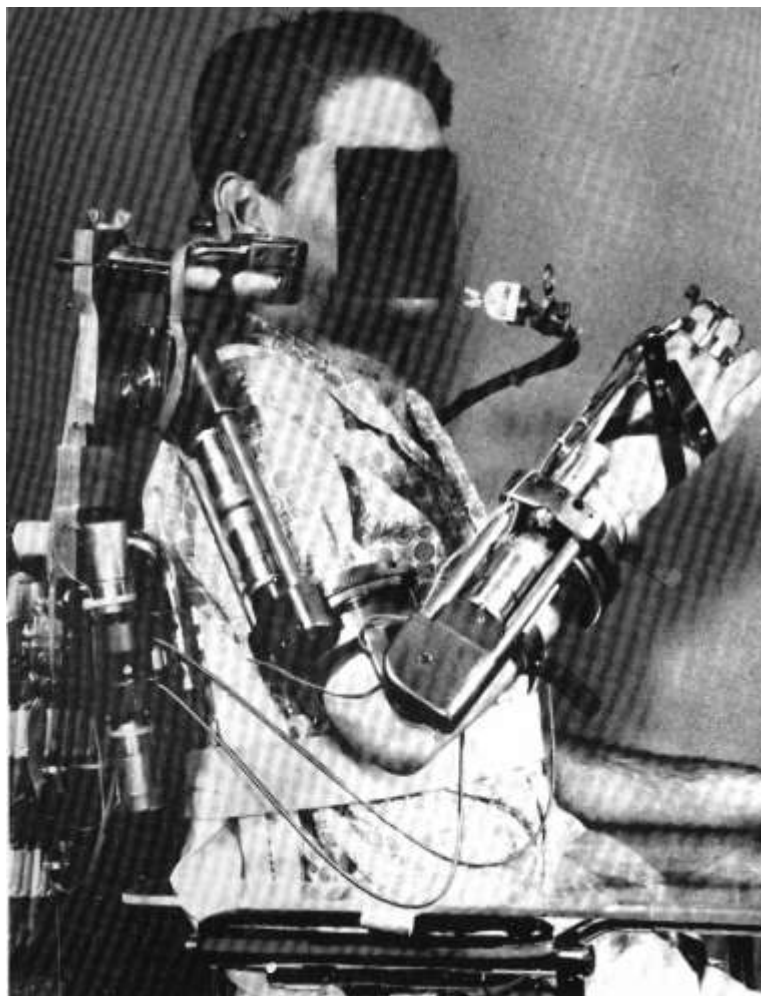
FES Walking



FES Walking



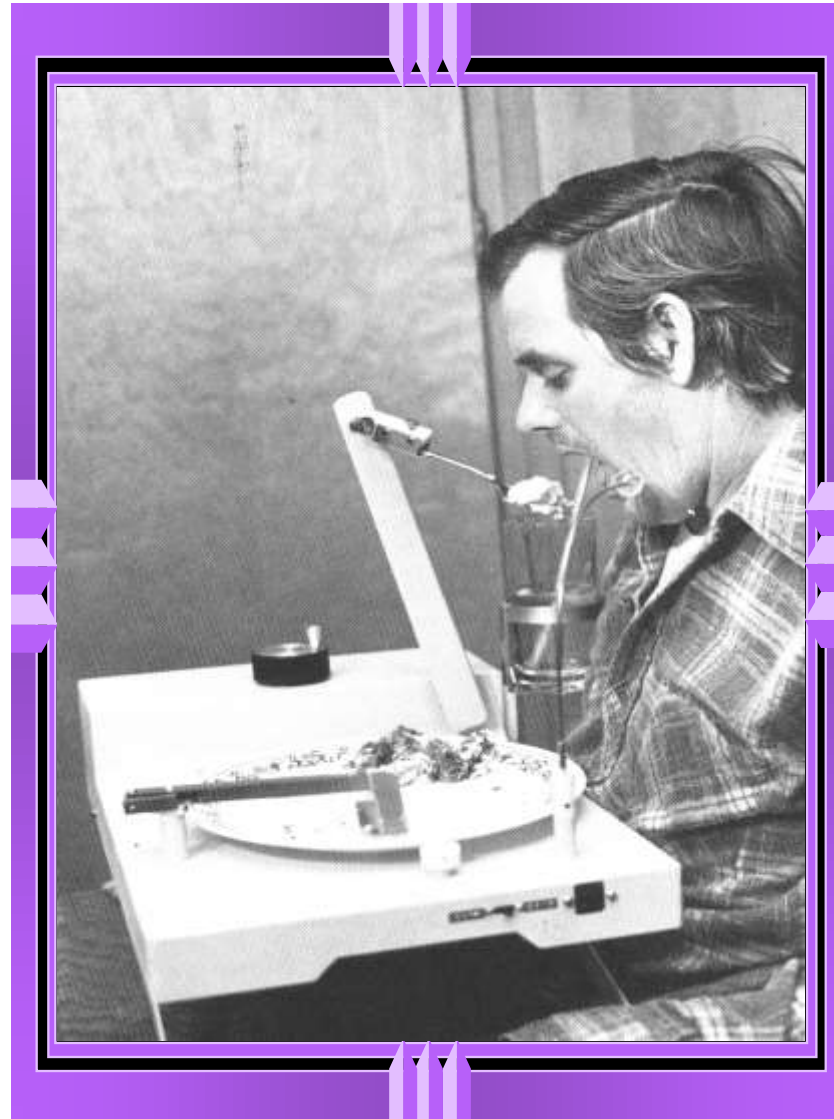
Chin Controlled Arm Exoskeleton



FES Grasp Control



Robotic Feeding Aid



Robotic Feeding Aid



Early Environmental Control System



Environmental Control System



Voice-Recognition Environmental Control System



Eye-Gaze Control



Eye-Gaze Control



Switches



Augmented Communication System



“Redneck Inventions”



“Redneck Inventions”



Wheelchair Videos

1. Steampunk Professor Xavier
2. Howe & Howe Rip Chair
3. Orange County Chopper – Reeve Foundation

Steampunk Professor Xavier Wheelchair Project



[Video](#)

Steampunk Professor Xavier's Wheelchair
By: Daniel Valdez
<http://www.smeeon.com/>

Howe and Howe Rip Chair



[Video](#)

Orange County Chopper

- Christopher & Dana Reeve Foundation
- [Video](#)



Thursday

Midterm Student Project Presentations

Time Slots:

- | | | |
|----|-------------|--------------------------|
| 1. | 4:15 - 4:25 | Mark Murphy – RotaBrake |
| 2. | 4:25 - 4:35 | Open |
| 3. | 4:35 - 4:45 | Open |
| 4. | 4:45 - 4:55 | Nicole Torcolini |
| 5. | 4:55 - 5:05 | Anna Ly & Hain-Lee Hsueh |
| 6. | 5:05 - 5:15 | Open |
| 7. | 5:15 - 5:25 | Open |
| 8. | 5:25 - 5:35 | Open |

Today



Nancy Frishberg, PhD

MSB Associates

What's up with the Telephone?

Short Break

