

Tools and Techniques for Prototyping Haptic Interfaces

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Provancher

Welcome

Workshop Goals

- Increase participants' knowledge of haptic hardware components and design practices
- Reduce barriers to prototyping
- Make connections to others with similar interests
- Have Fun!

Format

- Group discussions about individual research areas, why you are interested in haptic prototyping. 13:00-13:15
- The Process of Prototyping (Mousette) - 13:15-13:45
- Sensors and Sensor Processing (Kuchenbecker) - 13:45-14:15
- Break - 14:15-14:30
- Actuators and Actuator Modeling (Morrell) - 14:30-15:00
- Fabrication and Rapid Prototyping (Provancher) - 15:00-15:30
- Control Hardware (Morrell) - 15:30-16:00
- Break - 10 mins
- Haptic Design Studio - Concept Generation - 16:10-17:00

Necessity is the mother of invention

- Break into groups of 3-4 people - choose unfamiliar faces
- (5 mins) Your field of research, your interest in prototyping
- (5 mins) Write two “wish” statements for haptic hardware
- (5 mins) Share the wish statements with your group

Presentations

- Camille Mousette, Prototyping to learn
- Katherine Kuchenbecker, Sensors, sensor processing
- John Morrell, Actuators, control electronics
- Will Provancher, Fabrication techniques

Haptic Concept Studio

- Reconvene into your groups.
- Each member picks one wish statement from the beginning.
- As a group, generate as many ideas as you can to achieve the (4) wishes.
- Each group should present 1-2 ideas for haptic devices to the rest of the workshop attendees.