Happy Hands: An Instrument for Talentless Folks Neha Godbole | Meghna Mandava | Henry Muller

- A digital musical instrument that is played using gloves with flex sensors, a rotary switch, and an <u>accelerometer</u>
- Can be used to play a song in any key
- Can play multiple notes at a time
- Uses a flexible software platform that allows for arbitrary sensor inputs and audio outputs
- Runs independently of a desktop computer

Happy Hands: Current Status

- Able to detect which flex sensors are activated and position of rotary switch
- Able to play arbitrary musical notes using PWM
- Implemented majority of software platform allowing for arbitrary customization of inputs and outputs
- Need to connect separate pieces of hardware together

Happy Hands: Problems/Challenges

- Figuring out the best way to generate waveforms for arbitrary chords
- Keeping track of abstraction barriers in the code
- Getting hardware to actually be usable (the glove doesn't fit everyone the same)
- Keeping circuitry minimal

