

Assignment #0

If you had to come up with your own Senior Design Project, what would it be?

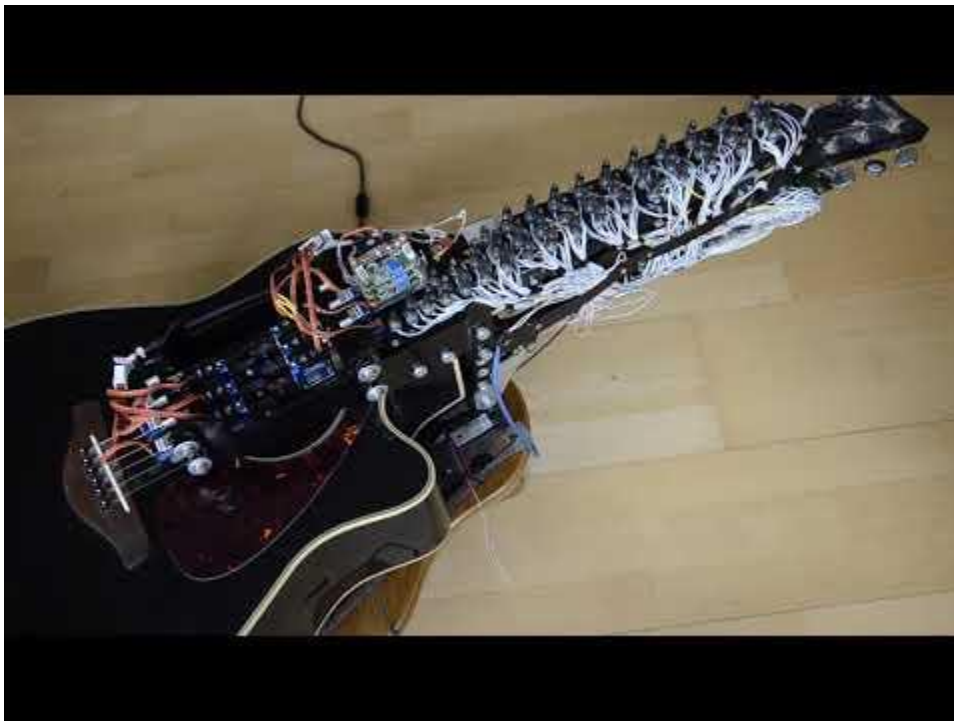
- Describe the goals and objectives of your project, then list as many technical specifications and requirements as possible
- Indicate whether you'd like to pitch this project idea to the class
- Limited to 1 page
- Please attach a second page showing a screenshot of you logged into the Career Services Handshake system.

I would like to create a self-playing guitar robot, such as the one in the video below. The goal of this project would be to make a robot that is programmed to be able to take any piece of audio it is given and play it on a real life guitar, by using an algorithm that reads MIDI notes and finds an optimal way to play and fret them on 6 strings.

Requirements:

- Must be able to pick/strum AND fret all 6 strings independently (without breaking strings or interfering with itself).
- Must be able to read and attempt an arbitrary piece of audio recording or music

I would like to pitch this project idea to CS/CE/EE/ME Senior Design 1 students.



Screenshot:

The screenshot shows a web browser window with the URL ucf.joinhandshake.com/stu/schools/340. The browser's address bar and tabs are visible at the top. The page content includes a navigation bar with 'Jobs', 'Events', and 'Employers' links, and an 'Inbox Career Center' notification. The main banner features a photograph of a UCF building and fountain, with the UCF logo and the text 'University of Central Florida' below it. Below the banner are four white boxes with the following content:

- Appointments →**
Schedule time to meet with experts and build your career
- Resources →**
Read curated content from your career center
- Experiences →**
Track your internship or co-op experiences
- Surveys →**
Answer questions from your career center