

**Undergraduate Design Project**  
**Motion classification using sensors for automatic music generation**

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In any musical program, the conductor plays an important role in synchronizing various instruments. The idea behind this project is to measure and translate music conductor's motion and characterize this in different categories so that different types of music and/or instruments could be played automatically. The basic objective is to use sensor connected to conductor's hand and characterize them so that the signal sent via wireless device to a base station could understand and interpret what the conductor wants. Depending on this, the base station could generate control signals to automatically generate different types of music automatically. We have been collaborating with the Music school at UC to work on details. But, that is the basic concept. We will buy appropriate sensors while we do have wireless radios in our lab as well as the base station.