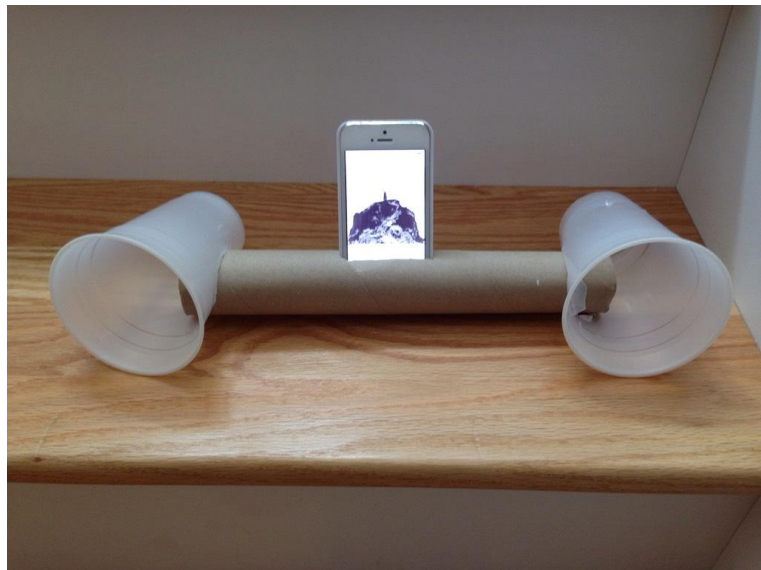




BA/SA/Group/Lab:

## Distributed Speaker Synchronization

Most people carry their smartphones in their pockets wherever they go. These smartphones come equipped with speakers that usually emit audio of low fidelity, which frustrates some people to such a degree that they go out and buy external devices like battery powered portable bluetooth speakers. Some other people attempt to boost their phone's sound quality by building constructions of varying complexity using ceramic bowls or even toilet paper rolls, as seen in the picture.



While their approach makes good use of otherwise obsolescent materials, we propose a system that synchronizes the playback of music across multiple smartphone devices. This system is looking to boost the emitted sound without the users having to carry, craft or buy extra hardware. The only thing this system requires is a number of smartphones which are readily available in an average group of people.

The goal of this thesis is to create a system that achieves synchronous playback among a number of speakers that may be scattered across a room. If that sounds like something you're interested in pursuing don't hesitate to contact us.

**Requirements:** Creative thinking and advanced programming skills are advantageous to successfully work on this topic. The student(s) should be able to work independently!

**Interested? Please contact us for more details!**

### Contacts

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