Sociometric Badge is a set of wearable social sensors developed by Boston based company named Humanyze. It promises to optimize how people works in office environment. To achieve such goal, it works by constructing physical, real - life, social networks based from social interaction of its wearers. As the name and its goal suggest, social activity defined with multiple correspondents interchange informations both subtle and explicitly. Thus, Sociometric Badge cannot work on its own. The deal usually comes with a set of Sociometric Badges and its supporting environment (an application to extract data, as well as web client).

Although, Sociometric Badge primarily intended to be used in office environment, there are requests come from social scientists as well. Traditionally, social scientists use interview, observation, and survey to get social data. In the recent day, there are technologies to leverage interview and survey. For example, with Skype people can conduct interview over the Internet and there are web based applications like Google Form or Survey Monkey to help people to make online survey. However, there are no latent technologies that can be used to help social observation just yet. Sociometric Badge can be the answer for such problem, as it can help social scientists to do social observation and give additional parameters to interview and survey.

The highlight of this project is about a misfit principle between social scientists and the Sociometric Badge itself. The Sociometric Badge started from a sequence of similar researches and products. The original inspiration was from 1992's Active Badge by Olivetti Research. Between Active Badge to the Sociometric Badge, there are others similar projects. These projects led into the development of the Sociometric Badge in 2008. However, after 2008, there are little to no information of the Sociometric Badge. Until, it then re - appeared as a commercial product. As the nature of common commercial products, the Sociometric Badge became a close - ended product. There are neither hardware and software development kit for the newest version of the Sociometric Badge. This is a bummer for the social scientists if modifications are necessary. Additionally, as the time this paper is written, the only way to buy the Sociometric Badge is with an email form in the bottom of the company's website (https://www.humanyze.com/contact.html). There is no obvious "Buy Now" button as it is usually in e - commerce based website. I tried to contact them to ask for informations regarding the Sociometric Badge, however there are no reply. These problems are what make the Sociometric Badge is not accessible to use for research purposes.

Aside from the Sociometric Badge itself, recently, there is Rhythm Open Badge. Rhythm Open Badge is an open source project with MIT License and has its repository hosted within GitHub (https://github.com/HumanDynamics/openbadge/). From its homepage (http://www.rhythm.mit.edu/open-badge/), this project offers cheap solution to help people with interaction studies. At some senses, most of it, Rhythm Open Badge is similar to the Sociometric Badge. Rhythm Open Badge project started on 21st January 2016. At the time this paper is written it is still under development. Hence, the documentation is not yet complete. From this point, one could make Rhythm Open Badge with downloading schematics, fabricating the board, attaching the electronic components, then uploading the codes.

I identify myself as someone who do programming more than making electronics. My personal view is that doing and learning programming is more "portable" than learning and making electronics. Additionally, programming has little to no risk compared with making electronics. With recent days electronics devices get depreciated quickly, with new and better modules come every months, I want to set this project to make an alternative device to the Sociometric Badge that is in higher level than the Rhythm Open Badge with low - risk, easy to make and modify approaches.