

We are building a seismic network that harnesses the accelerometers in personal smartphones to record earthquake shaking data for research, hazard information and warnings. We developed an android application MyShake, that running on the phone that has the function to distinguish earthquake shakings from daily human activities based on the different patterns behind the movements. It has a built-in artificial neural network detection algorithm to distinguish earthquake signal from human activities. When MyShake is triggered by the earthquake-like movements, it sends the trigger information back to our server which contains time and location of the trigger, at the same time, it stores the waveform data on local phone first, and upload to our server later. After release the application in Feb, we currently have 60 Gb waveform data uploaded to us every day that need to be processed. We will show some initial development of the infrastructure and algorithms to process the data.