

## Tell us what your idea is.

**DeafTongues** is an Android App to help communication between deafs and non-deafs.

Deafs hear the world differently and talk differently. That's why they use sign language but the sign language cannot be useful all the time such as phone call or communication with who doesn't know sign language. This project is just started only for my private need.

One of my family is deaf, and I have felt the lack of conversation with her.

DeafTongues app uses mic and speaker.

This app listens the talking voice of deaf via the mic, and make it clear then outputs the words to the speaker. I believe this task can be solved by using machine-learning techniques in audio super resolution and image style transfer.

## Tell us how you plan on bringing it to life.

This project is only just begined. Only concept exists.

To build this idea as real, I will use Tensorflow-lite to drive ML model on the phone. Delivery plan:

- 1. Define the problem more detail and training data and gather the data
- 2. Research the model about audio super-resolution and try it by Jan 31, 2020
- 3. Research the model about style transfer and try it by Feb 28, 2020
- 4. Test and find the best model by using step 2 and step 3 by Mar 31, 2020
- 5. Convert model for English version(until step 4, I will run this project by my native language, Korean) by April 30, 2020

## Tell us about you.

I am an Android developer working in LG Electronics.

I have 7+ years experiences of UI developing such as Launcher, Lock screen. And now I'm developing some rule-based AI logic and context-awareness logic for mobile phone.

I'm just a beginner in machine learning, but I can make this project as real by the helps of Google experts. I do believe we,the developers have a super power to change the world, and I can be the one.



## Next steps.

- Be sure to include this cover letter in your GitHub repository
- Your GitHub repository should be tagged #AndroidDevChallenge
- Don't forget to include other items in your GitHub repository to help us evaluate your submission; you can include prior projects you've worked on, sample code you've already built for this project, or anything else you think could be helpful in evaluating your concept and your ability to build it
- The final step is to fill out this form to officially submit your proposal.