



Tell us what your idea is.

Problem: people on public transportation are always on their phone - listening to music, podcasts, watching videos, etc. Because they are wearing headphones, they often miss important PAs (public announcements) from train/subway/metro conductors, flight attendants and other transport employees. Those PAs often include very important information about emergencies and other reasons for delays as well as generic information like next stop announcements and route information.

Solution: App or service that runs in the background on a phone and listens to surroundings. As soon as it recognized a PA, it displays a notification with live transcript of the announcement allowing a user to be aware w/o pausing their media.

Benefit: People with hearing impairment will benefit the most as well as other customers of public transport system who prefer to be on their phone during a ride.

Tell us how you plan on bringing it to life.

How I'll make it: I will build a TensorFlow model and train it to recognize different kinds of public announcements. Then I will convert it to TensorFlow Lite format and make it accessible on Android device without internet connection.

What I need from Google is:

- Google's reach and marketing power to engage more users in data set collection and beta testing
- Free GCP account where I can create and train the model
- Mentor from Google, ideally from Home or Nest teams, who can support me from technical and UX perspectives

Timeline:

- *December* - finalization of requirements, definition of scope for MVP (Minimal Viable Product)
- *January-February* - 1st round of development: collecting datasets, creating TensorFlow model, train the model
- *March* - converting to TensorFlow Lite, integrating with Android app
- *April* - final adjustments, field testing, stabilization, submission to Play Store



Tell us about you.

I'm a seasoned technologist with over 15 years of experience in software engineering, solution architecture, and engineering management. I'm currently holding a position of Senior Solution Architect at EPAM Systems' Mobile Practice with a focus on Google technologies in general and Android development in particular.

In my free time I play bass guitar and check out unknown heavy metal bands. I have a Master's degree in Computer Science from Belarusian National Technical University.

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.](#)**