# Gamified Mobile Pronunciation Tutor for Language Learners Mini Intro

SmartTalk members: Joseph Vargovich (Lead), Andrew Munoz, Christian

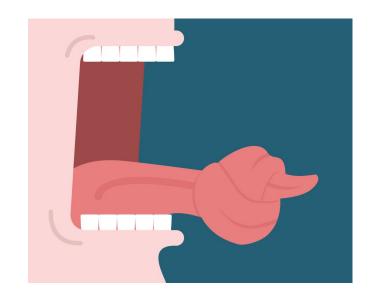
Bito-on, Kehan Cao and Malik Jones.

**Mentor:** Fabio Santos

#### Introduction

Most users that learn a foreign language have little or no capacity to focus on the pronunciation

Gap of innovation for mobile devices to provide a gamified platform for learners to practice their pronunciation.



## Our Client: Dr. Okim Kang

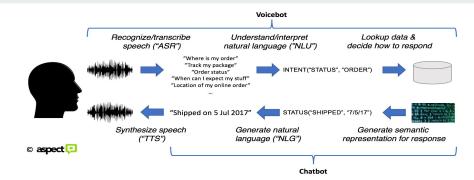
- Director of the Applied Linguistics Speech Lab, NAU
  - Three members of her lab: Kevin H., SungEun C., An Hoang N.
- Research focuses on Computer-Assisted Pronunciation Training (CAPT)
- Desires a fun, convenient way to perform second language assessments through a gamified mobile app that encourages language learners to sharpen their pronunciation skills



# What do existing systems get wrong?

- Lack of mobile software for foreign language learners that both focuses on pronunciation and encourages learning through gamification.
- CAPT Software drawbacks:
  - Can be both costly to the learner and prohibitive for researchers.
  - Does not allow course designers to create relevant tasks for learners.
  - > No relevant feedback on key features of pronunciation
  - Does not implement gamification to motivate the practice of pronunciation.
  - Most modern ASR technology is proprietary and difficult for linguistics researchers to use

#### The Solution



- Mobile App
  - Gathers voice data for the client, but provides the user with pronunciation review.
- Website Dashboard
  - Allows instructors and researchers to analyze audio data and manage user accounts as well as provide users with language courses.

### **Development Plan**

- Requirements Acquisition/Refinement
  - Weekly client meetings
- Technical Investigation
  - ASR Technology
  - Web to mobile app interaction through a shared database
  - Correct implementation of gamified elements
- Pertinent Issues
  - Bridging the technological and linguistic gap between teams



#### Conclusion



- We want to create a better, more entertaining learning experience for our users through gamification.
- By having this product out to the public, we hope to assist and encourage people to learn a new language in a different way.