ToonTuner

**Inspiration**

One of the greatest challenges faced by creators of manga (alias manhwa/manhua), a phenomenon better known as comics originating in East Asia but surprisingly popular in the rest of the world, is submitting work by their deadlines. Consequently, many “scanlators” suffer due to extreme public demand of release. Scanlators are individuals or groups dedicated to scanning physical renditions of manga/manhwa/manhua (if applicable) and translating them to other languages. This process typically takes a day to complete, as scanlators must peruse tens to hundreds of pages per day and ensure that their alterations fit the criteria for an acclaimed work of art. The main inspiration to create ToonTuner was our passion for WebToons and other Asian comics, as well as a feeling of sympathy towards the scanlators’ busy lives and dedication to provide entertainment to the masses.

**What it Does**

ToonTuner accepts an input of a raw (untranslated) work and uses Google Translate to convert the text to English. As text boxes are typically small and do not have overly complex language structures, these works don’t require highly advanced translations and Google Translate is enough for the overall functionality of ToonTuner. By simply loading an image of the raw work, text is recognized through Google Vision API. The program is designed to acknowledge objects contained within a text box (including word bubbles) as floating texts, usually onomatopoeias, are often intentionally left untranslated for aesthetic purposes. The resulting translations are finally placed in white boxes and replaced over the original text, and can then be saved with the click of a button.

**How we Built it**

The code for ToonTuner was made through Python 3.7.2 and images inputted were run through Google Vision API. The graphics and buttons were all designed alongside the program and no external source was used for these images. Google Translate API was also used with Python for the basis of ToonTuner’s functionality.