User's guide – (GitHub)

Local Run:

- Clone the files from GitHub into your VSC environment

  1. Use the `cd` command in the terminal to navigate to the directory where you want to clone the repository: `cd path/to/your/directory`

  2. Use the command in order to clone the project from git:
     `git clone https://github.com/ShayZak1/Phase-B-SonicCipher`

- Install Frontend Packages

  1. Open your terminal and ensure you're in the root directory of your project. Use the following command to move into the frontend folder:
     `cd frontend`

  2. Once in the frontend directory, run the following command to install all necessary packages:
     `npm install`

- Install Backend Packages

  1. Open your terminal and ensure you're in the root directory of your project. Use the following command to move into the backend folder: `cd frontend`

  2. Once in the backend directory, run the following command to install all necessary packages:
     `npm install`

- Run Client

  1. Open your terminal and ensure you are in the root directory of your project. Use the following command to move into the frontend folder:
     `cd frontend`

  2. Once in the frontend directory, start the client by typing the following command: (after doing the command you can navigate to http://localhost:3000/)
     `npm start`

- Create .env file in Frontend folder
  Inside the folder copy the next line in order to have access to the features that are needed
  In order to run the program otherwise the functionality of the program wont work.

  ```
  REACT_APP_BACKEND_URL=https://sonic-cipher-server.vercel.app
  ```

- Run Server

  1. Open your terminal and ensure you are in the root directory of your project. Use the following command to move into the Backend folder: (after doing the command you can navigate to http://localhost:5000/)
     ```
     cd backend
     ```

  2. Once in the frontend directory, start the client by typing the following command:
     ```
     Node app.js
     ```

Deployment run:

If you prefer to access the deployed version of the application hosted on Render, you can visit this link to access the website:
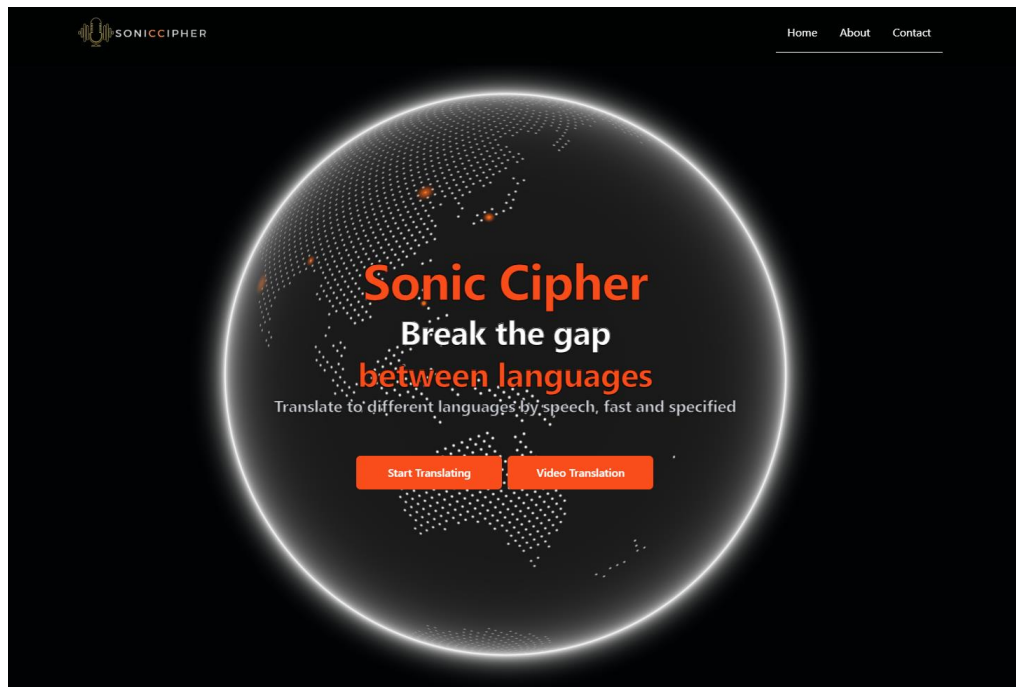
https://sonic-cipher-omega.vercel.app/

Exploring Main Pages and Key Features

Welcome to SonicCipher! Below, you'll find an overview of the main pages along with key features and functionalities.

Home Page

Our home page serves as the gateway to the platform, providing an introduction and quick access to essential features. Users can explore different sections, such as starting a translation session by clicking the "Start Translating" button or engaging in a live video conversation. The live video feature translates spoken language into captions, displaying the translated speech for seamless communication.

Contact Us

If you have any questions or need support, simply leave your email address, and our support will get in touch with you as soon as possible.
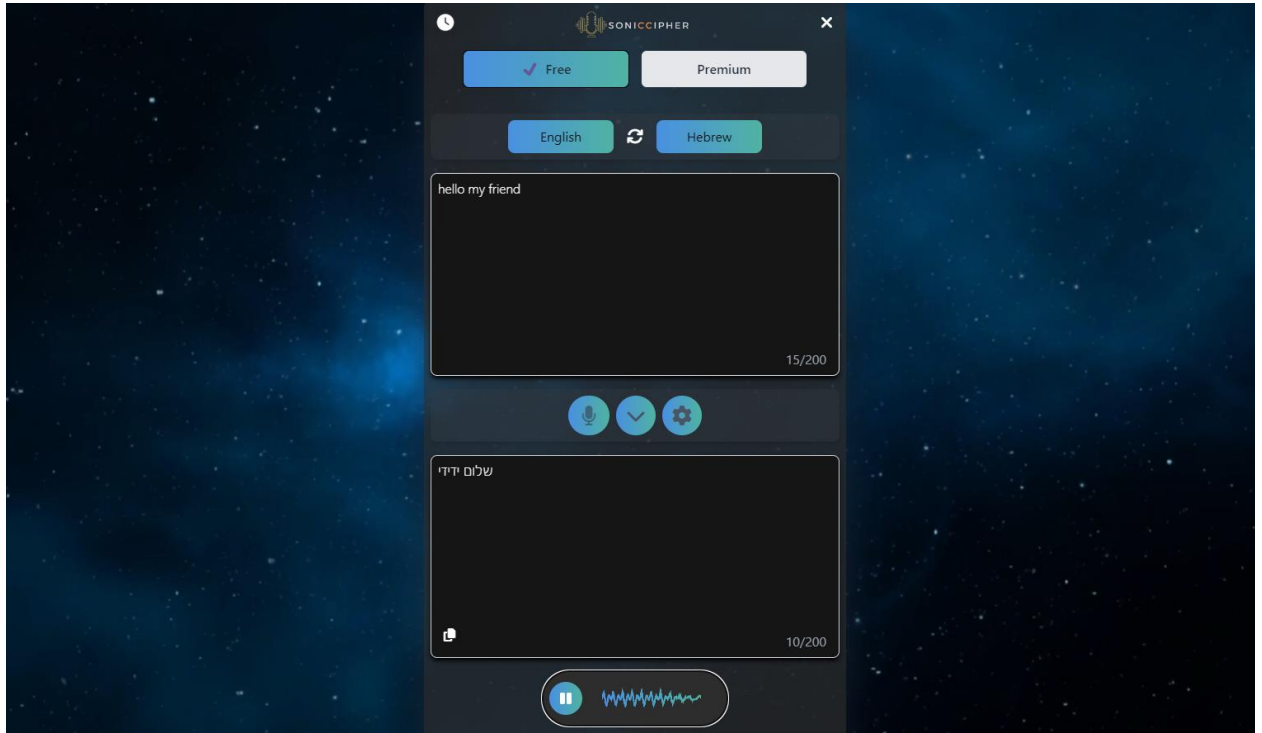
Translating text : Step-by-Step Flow

Let's walk through the main steps involved in starting a translation on our platform, from entering your text to receiving AI-generated translations.

Step 1: Choose translation method Free/Premium

Begin by selecting your preferred translation method. You can choose between the Free option for basic translations or the Premium option for enhanced features.

Free Method

1. **Choose Languages:**
Select the languages for translation. Use the left option to choose the origin language (the language you are translating from) and the right option for the target language (the language you want to translate to).

2. **Enter or Record Text:**
Type your text into the first (upper) black text box.
Alternatively, you can press the microphone icon to record your speech. Your spoken words will be converted into text and placed in the text box. Press the microphone icon again to stop recording.
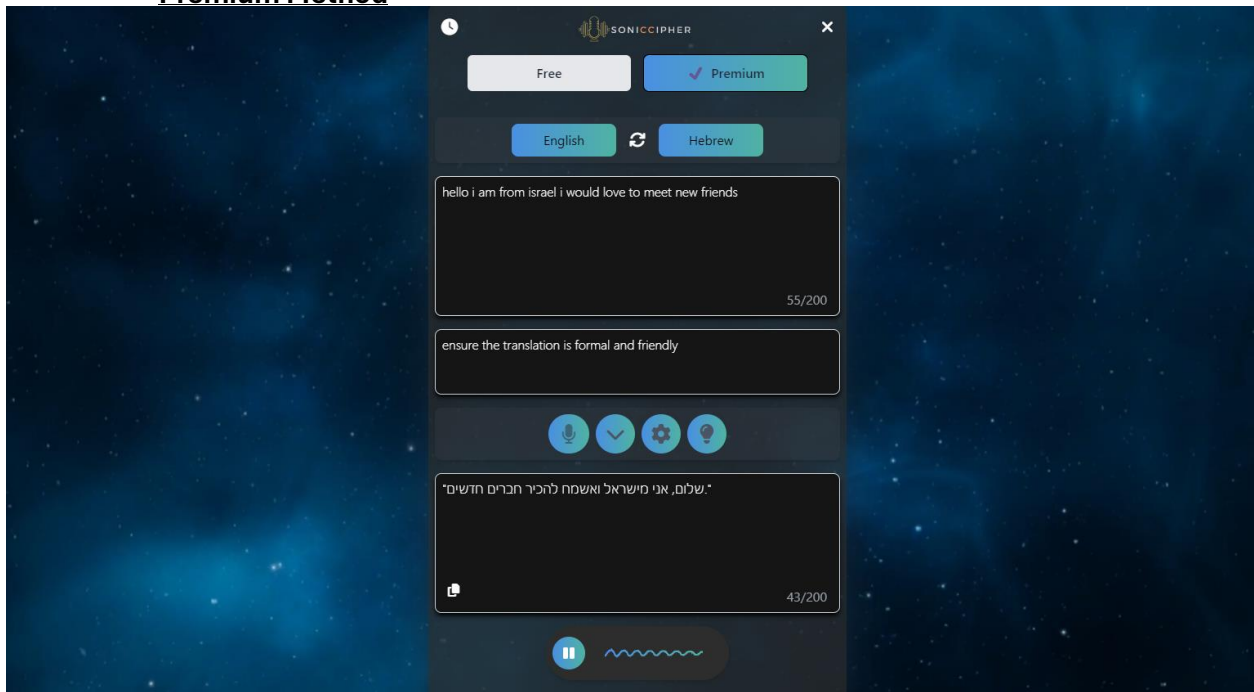
3. **Translate the Text:**
Once your text is in the box, click the middle button (an arrow pointing down) to translate the text, or simply press Enter on your keyboard if you are still inside the text box.

4. **View the Translation:**
The translated text will appear in the lower text box in the target language and will be played as sound.

Premium Method

1. **Choose Languages:**

Select the languages for translation. Use the left option to choose the origin language (the language you are translating from) and the right option to select the target language (the language you want to translate to).

2. **Enter or Record Text:**

Type your text into the first (upper) black text box. Alternatively, press the microphone icon to record your speech, which will be converted into text and placed in the text box. Press the microphone icon again to stop recording.

3. **Add User Specifications:**

Enter any additional specifications to modify the translation according to your preferences in the second text box (located below the first one).

4. **Translate the Text:**

Once your text is ready, click the middle button (an arrow pointing down) to translate the text. Alternatively, press Enter on your keyboard if you are still in the text box.

5. **View the Translation:**

The translated text will appear in the lower text box in the target language and will be played as sound.
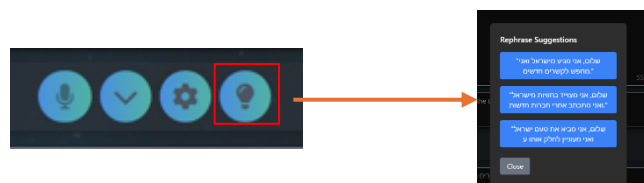
- In the Premium method, you have an additional option to rephrase your translation, providing you with alternative versions that may better suit your needs. To use this feature:
1. **Translate the Text**:

   Follow the steps outlined above to translate your text.
2. **Generate Rephrased Options**:

   Click the Lightbulb icon to generate alternative phrased options. Review the options and select the one that best fits your requirements.
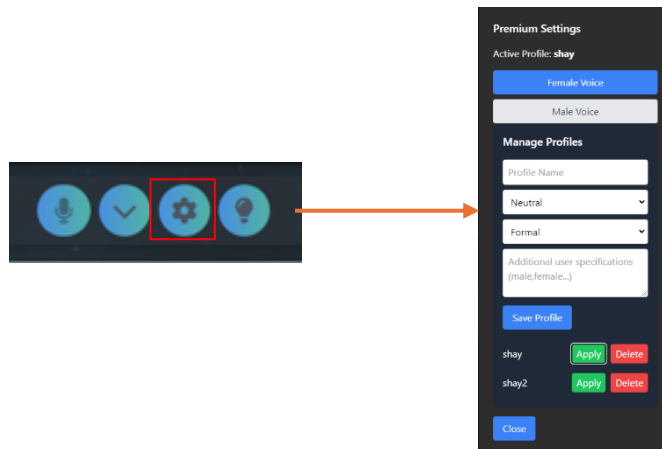
<u>Premium Profile Feature</u>
The Premium translation method includes an additional feature that allows you to save your settings by creating a personalized profile. This profile will store your preferences and settings, enabling customized translation outputs.

To use this feature:
Create a Profile: Set up a profile by pressing the cog icon and then entering a profile name and selecting your desired settings, which will influence the translation output according to your preferences.
Apply Your Profile: Once the profile is created, it will appear in the list below. Select your profile and apply it to activate your personalized settings for translations.

Additional features:

Both Free and Premium translation methods offer the following additional features:

1. **View Translation History:** Access your past translations to review or reuse them at any time by pressing the history icon which is at top left corner of the window.
2. **Copy the translated text:** Easily copy the translated text by pressing the copy button located within the translated text box.
3. **Change Read-Aloud Voice:** Customize the read-aloud voice by choosing between male or female options in the settings (cog) icon.

Video Translation:

This feature enables users to connect securely via peer-to-peer connections for video chats, delivering both video and audio simultaneously. During the conversation, the speech of each participant is translated and displayed as subtitles, allowing for clear and effective communication across different languages.

Requirements:

Before using this feature, you need to allow access to your microphone and camera upon entering the Video Translation page. Without granting access, you will not be able to generate a peer serial code, which is required to connect with the other user. Share this code with the other user to establish a secure connection.

- Not all browsers support our API so in case the translation wont work we are sorry

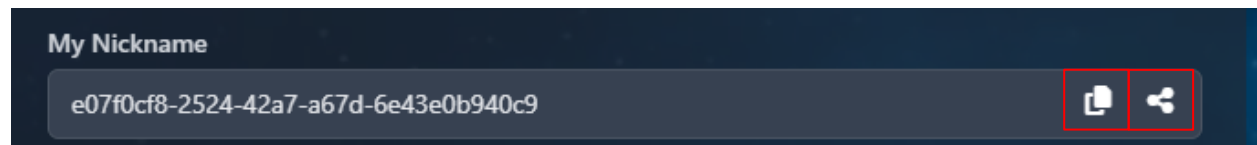### Step 1: entering the page of video translation

After you enter the application page you will see instructions which explain the user how to use the program, the peer code will be displayed as well at the bottom of the the instructions and you can copy it by pressing the serial number and it will automatically copy it.

Press got it! In order to continue.

Step 2: share your serial number with the other users

After generating a peer serial number, you can copy it from the initial step or by pressing the copy button located in the "My Nickname" text box, which saves the serial number to your clipboard. Alternatively, you can press the share button within the "My Nickname" text box to send an invitation via WhatsApp or email. When the recipient clicks the invitation link, they will be redirected to the Video Translation page with the serial number automatically copied into the appropriate text box.
Once the second user receives the serial peer number, they need to paste it into the "Recipient" text box to establish the connection.

Step 3: choosing the origin language and target language.
After completing the previous steps, select the origin language (the language you will be speaking) and the target language (the language you want your speech translated into). Once you have made these selections, press the "Connect" button to establish a connection between the two users.

Print screen of the video translation page (with instructions and without)

Video Translation

My Nickname
0b58def8-f423-471a-baea-ba9cb350f93d

Recipient

Source Language
English

Target Language
Hebrew

Instructions

Follow these steps to start your video chat:
1. Copy your Nickname (click the box to copy).
2. Share your Nickname ID with the other person.
3. Set your Source Language to the language you speak,
and Target Language to the language the other person speaks.
4. The person who received the ID should click 'Connect' to start.

Your Nickname:
0b58def8-f423-471a-baea-ba9cb350f93d

Got it!

Video Translation

My Nickname
e07f0cf8-2524-42a7-a67d-6e43e0b940c9

Recipient

Source Language
English

Target Language
Hebrew

Connect

not connected