

Installation guide/User manual

To participate in the development of this project, you will need:

- Git (ver. 2.17.0 or later)
- Node JS (ver. 8.11.2 or later)
- Any text editor (Atom, Notepad++, Vi)

To install **Git**:

1. Go to <https://git-scm.com/downloads>
2. Download and install the resulting file(s)

To install **Node JS**:

1. Go to <https://nodejs.org/en/>
2. Download and install the resulting file(s)

To run a **React App**:

1. cd into the root directory of the repository
2. Type "npm install" and let it run
3. Type "npm start" and it will open a browser window with the app

How to train an **AI using Google Cloud**:

1. Go to <https://cloud.google.com/>
2. Make an account and get \$300 credit
3. Set up a Compute Engine VM instance (ideally the one with the most processing power)
4. Go to your list of instances and click the SSH button on the left of your instance
5. On the new terminal window, after connecting, type: "sudo apt-get install git"
6. git clone the repository you'll use (we use <https://github.com/ajperrot/testAI.git>, which is a modified version of <https://github.com/ibab/tensorflow-wavenet.git> with our training data and checkpoints)
7. cd into the tfwavenet folder (or wherever your training script is located)
8. Install pip via "sudo sh" then "curl "https://bootstrap.pypa.io/get-pip.py" -o "get-pip.py" python get-pip.py"
9. Still within sudo sh, use "pip install -r requirements.txt" to install what you need to begin training and use "exit" to quit sudo sh
10. Run actual training with:

```
"python train.py --checkpoint_every=X --learning_rate=X --sample_size=X --restore_from=X"
```

replacing the X's with your values.