xSynth

World'st 1st 3d casual car Ai friend/Assistant for the Civic 10 gen

xSynth | God Bennett

World's 1st casual 3d car ai friend/assistant for the Civic 10 gen.

xSynth is a component in my "omni-automobil" modern era/sustainable energy design effort (concerning going beyond attrative shapes/surfaces in cars, and applying sustainable energy in the core language of automobile design). In particular, xSynth is as a "low energy" attempt to deliver an Ai friend in car, perhaps while parked.

_youtube demo: https://youtu.be/o4Nm8HfsZMw

_xSynth currently exists in 3 forms:

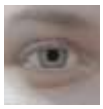
- HD Blender3d Desktop version, offered as a product sold opensea, as well as open-sourced (Ai gpt2 output-text with eye animation).
- Downgraded Unity Desktop version, for export to Android 4.2.2 version (Ai ibm assistant output voice with mouth and eyebrow animation):
- Downgraded Android 4.2.2 version, for use in my civic 10th generation hatchback (voiced Ai output/user voice or text input). (Which this document concerns)

Features

- xSynth uses the appearance of my very first "cryptosynth"; Cryptosynth Aeon 0000, an ai generated female virtual being powered by gpt2). Cryptosynth opensource: https://github.com/g0dEngineer/Cryptosynth
- xSynth features a my omni-automobil styled ui layout, including vertical text field used to allow user to talk to xSynth as an additional communication mode beyond voice.
- xSynth is a compressed/downscaled (1.5mb gltf) version of the HQ (80mb fbx format) Cryptosynth, to facilitate execution on my Honda Civic hatchback's "rooted" Display Console/Radio screen. (That has roughly only 512 mb of ram)
- xSynth is powered by IBM Watson assistant. xSynth uses an IBM skill file, made by God Bennett concerning Honda Civics and casual topics.
- The skill/technique file consists of samples of the types of questions/statements that the xSynth ai is expected to be able to process. IBM Watson then uses the aforesaid samples to anticipate a variety of inputs related to the samples, using Machine Learning/Ai.
- xSynth builds on Scott Hwang's IBM Watson unity3d template, however using custom IBM skill file discussed prior. Note that you have to use my version of this template provided on page 4, because I downgraded Scott's version in 2 ways, first to unity3d 2019.2 instead of 2019.4, to comply with my Honda Civic's android level as well as shader/material properties again for Civic compliance.

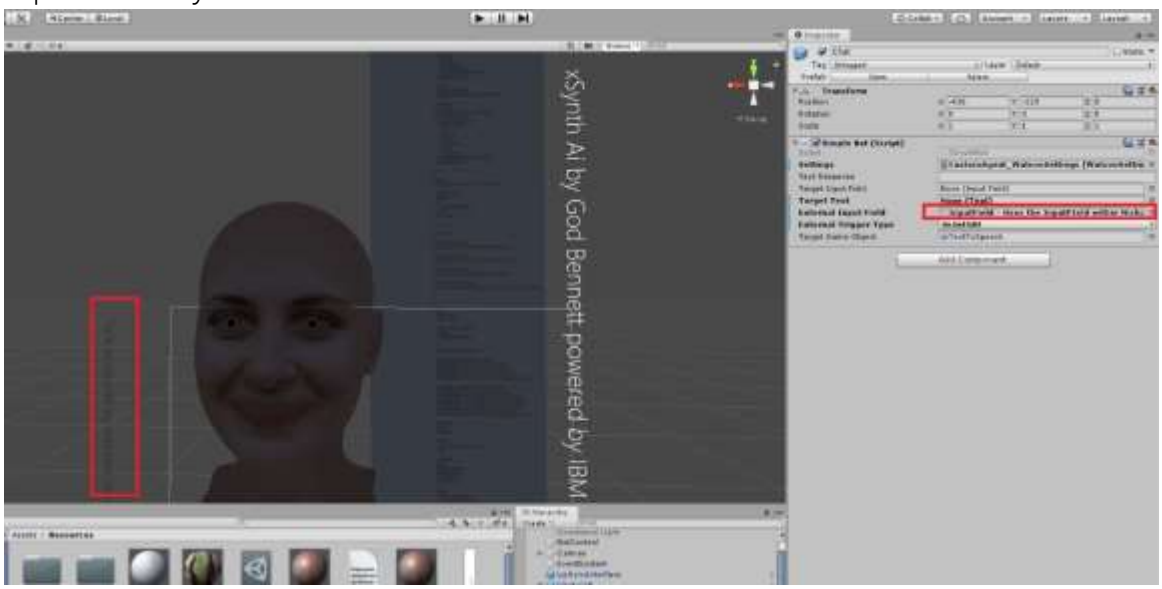
Download and run xSynth run instructions in your Honda Civic 10th gen

Figure: xSynth running on my Civic

1. Ensure you have Android version 4 eg, 4.2.2 in your Honda Civic/Car display console.
2. Turn on your Wifi on your Civic/Car display.
3. Root/hack your Honda Civic display, using Honda Hack. (25 usd) Allows installation of custom apps, like my xSynth app, or File Manager, or Youtube to your Civic, and other cool things like putting your reverse camera on while moving forward. (This can be done directly from your car, from the "search" icon in app list, by visiting autohack.org. You can buy the 25 usd key on desktop first, on the same site, then use the site in car to root your car's display)
4. In your car/Civic, after you rooted it, install Play Store, and login into your google account, or create one if desired.
5. In your car/Civic, after you rooted it, install a File Manager, (I suggest File Manager+). (This should be fine, as I find that my civic had about 2gb memory free internal, and more than 6 gb on sd card. Sadly ram is low around 512 mb, but my ai runs quickly regardless)
6. On your desktop or laptop, download my xSynth app (apk file ~45mb) and put it on a flash drive.
7. On your desktop or laptop, put the flash drive into the usb port. (I used the one under the cup holder in center)
8. In your car/Civic, load your File Manager app, and navigate to "USB" icon, and find my app called xSynth, with the icon below:
   a. 
9. Next, in your car/Civic tap the xSynth icon, and install, and ignore hardware limit warning with continue. Ignore Google Play store's limits for unknown apps as well, similar to Honda Hack. Wait for install (about 40 seconds)
10. Next, in your car/Civic, in File Manager, navigate to "Apps" icon, and scroll down if needed to find my installed xSynth app (It looks the same like the icon from (8)). Tap/Hold, and open to run the app.
11. Talk freely to xSynth about BOV mods inquiries, parts inquiries, honda history, meaning of life, or about xSynth itself. Say hello or good bye or other similar expressions. xSynth uses Ai to detect your voice.
12. An update may fix mouth animation, and make the app useful by integration actual honda location data like dealership data.

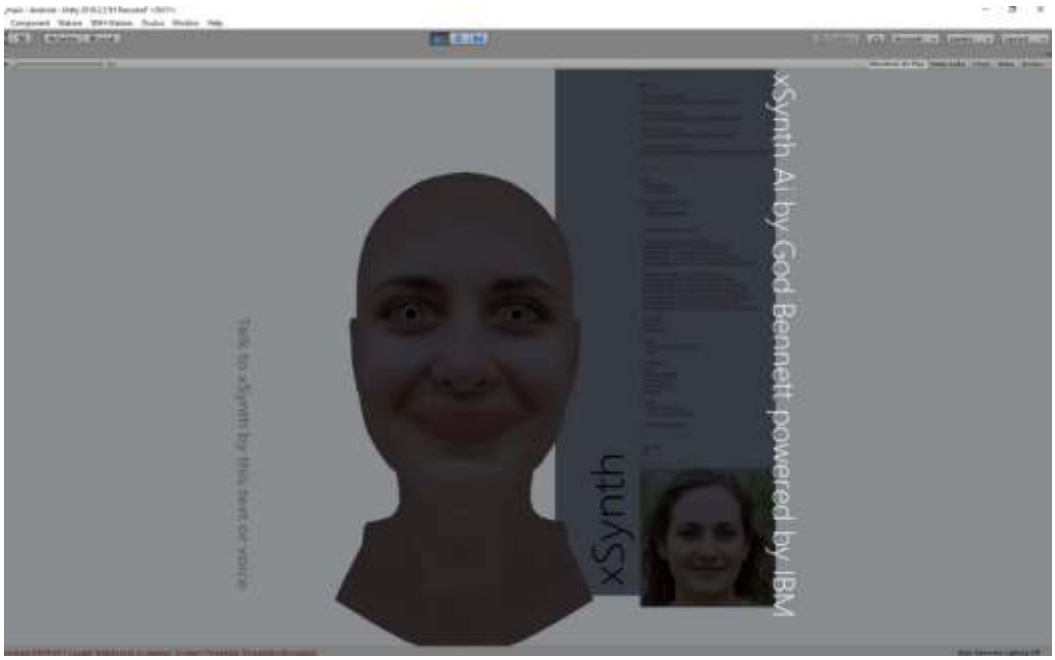
Replicate xSynth outside of the Civic, and on your Desktop/Laptop

1. Ensure you have at least Unity 2019.2.21 setup. (Note that you have to use my version of this template provided here, because I downgraded Scott's version in 2 ways, first to unity3d 2019.2 instead of 2019.4, to comply with my Honda Civic's android level as well as shader/material properties again for Civic compliance.)
2. If you don't know IBM Watson platform, follow this quick lesson by Scott Hwang.
3. Download my xSynth source code files, and open with Unity 2019.2.21.
    a. I configured this particular instance of Unity IBM Assistant to be compatible with the 2017 Honda Civic 10th Gen Hatchback's Display Console/Screen OS. Beyond build settings for Android 4.2, I also configured textures, materials, shaders etc.
4. xSynth 3d model is integrated into the scene xSynth_main.unity. I enabled user the ability to submit text input, apart from the default voice input that is standard. This was simple to do by supplying my vertical style input field, to Watson's External Input Field system.



xSynth vs Cryptosynth Appearance Sample

xSynth is more expressive than Cryptosynth , in terms of voice, although Cryptosynth utters unique expressions. xSynth uses machine learning for recognizing user input and automatically placing those into sill file categories with organized responses.



[Cryptosynth aeon] on desktop blender HD sold on opensea and opensourced: