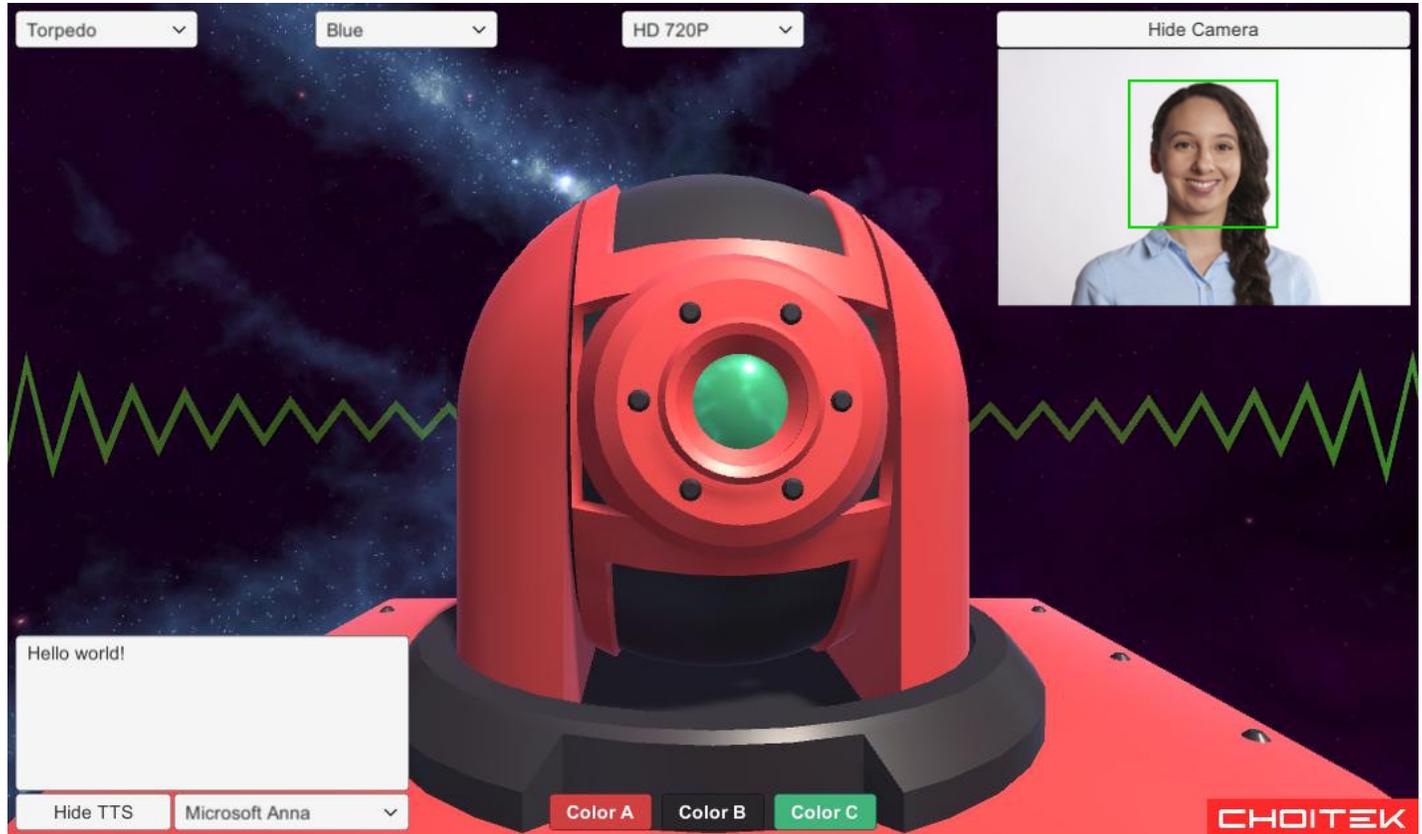


## Talking Robot Face Documentation

The Talking Robot Face app gives your Choitek Megamark Robot a highly customizable personality with an animated 3D robot face. There are 9 different 3D robotic face avatars, 6 different sky backgrounds, and an unlimited array of color combinations to truly personalize your own Megamark robot. The software also offers advanced computer-vision guided face tracking using your webcam, allowing your robot's face avatar to look at users it can see. And finally, the robot also has a powerful built-in text-to-speech system that uses your computer's voices to vocalize user inputs in real-time.

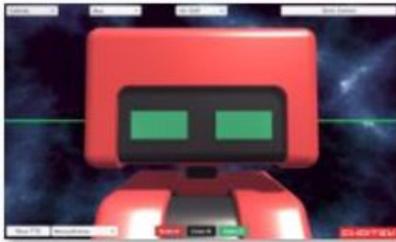


A view of the application with the "Torpedo" robot face, a blue background, webcam face tracking, and text-to-speech saying "Hello World!"

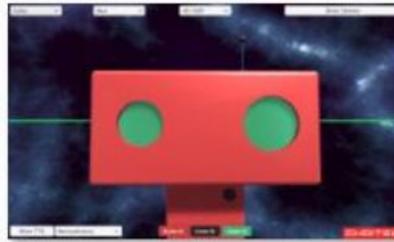
## 3D Robot Face Avatar and Skybox

### [Robot Face Select]

In the upper left corner of the screen, the first dropdown menu allows you to choose from a selection of 9 unique 3D robotic avatars.



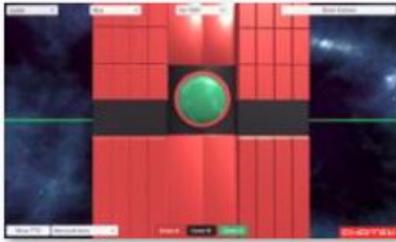
Cathode.jpg



Cubie.jpg



Eighties.jpg



Jupiter.jpg



Matrix.jpg



Prototype.jpg



Reactor.jpg



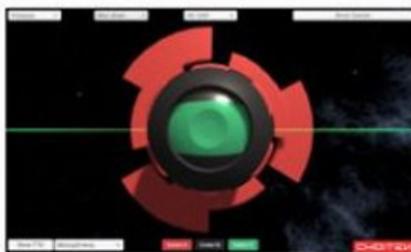
Security.jpg



Torpedo.jpg

### [Sky Select]

In the second dropdown menu from the upper left corner of the screen, you can choose from a selection of 6 starry galaxy backgrounds.



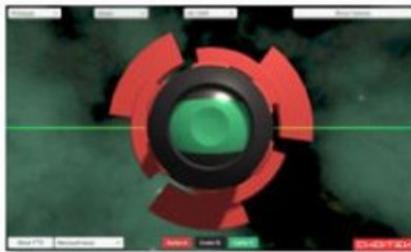
Blue Green.jpg



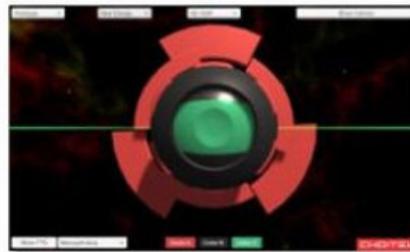
Blue Pink.jpg



Blue.jpg



Green.jpg



Red Orange.jpg



Red Yellow.jpg

## Computer Vision Webcam Face Tracking

### [Webcam Select]

The third dropdown menu from the upper left corner of the screen allows you to select a webcam for real-time computer-vision face tracking.



### [Show/Hide Camera]

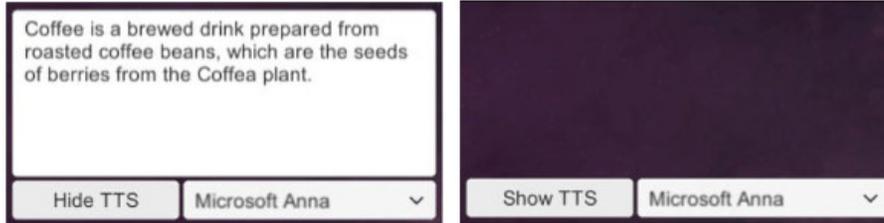
In the upper right hand corner of the screen, clicking on the Show/Hide Camera button will show/hide the live face tracking camera feed.



## Real Time Text-to-Speech System

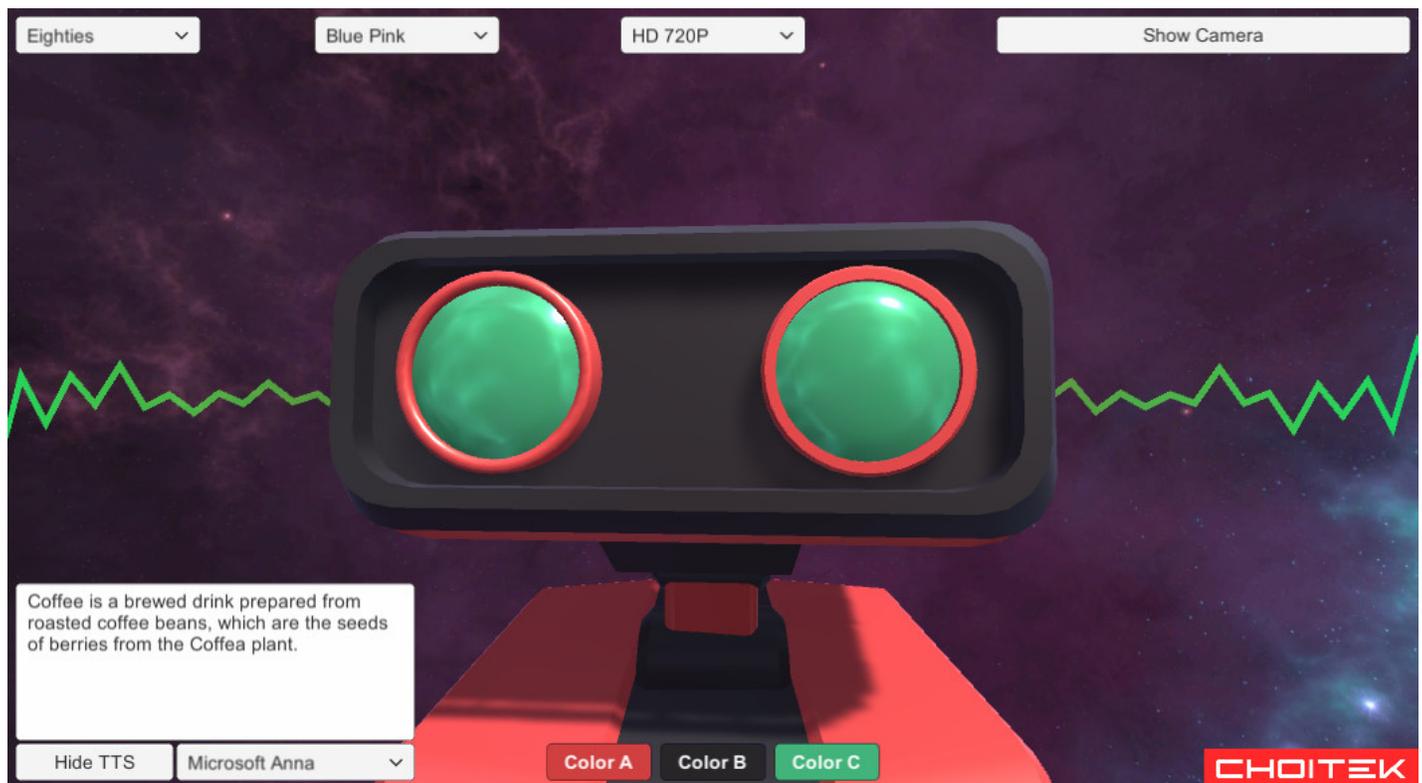
### [Show/Hide TTS]

In the lower left hand corner of the screen, clicking on the Show/Hide Camera button will show/hide the Text-To-Speech input box.



### [Text-to-Speech Input]

You can type into Text-To-Speech Box. After pressing the [Enter] key or going out of the Text-To-Speech Box, the 3D robot face avatar will vocalize your text input. The speech is visualized with a green line showing the frequency and amplitude of the generated speech audio.



### [Select TTS Voice]

If your system supports multiple Text-To-Speech voices, they will be listed in the dropdown menu next to the Show/Hide TTS button.

## Color Customization



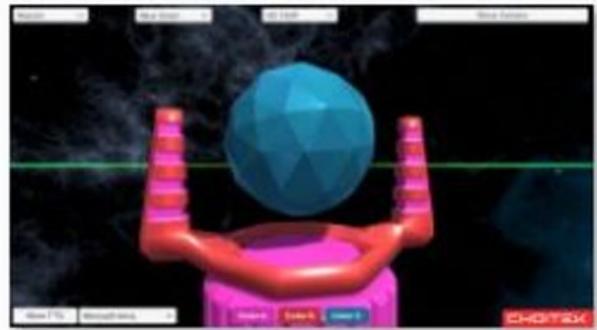
Colors (1).jpg



Colors (2).jpg



Colors (3).jpg



Colors (4).jpg

### [Color A]

Select Color A to change the primary color of the robot's 3D face avatar.

### [Color B]

Select Color B to change the secondary color of the robot's 3D face avatar.

### [Color C]

Select Color C to change the eye color of the robot's 3D face avatar.