Development of a Virtual Environment for Visualizing Emotions

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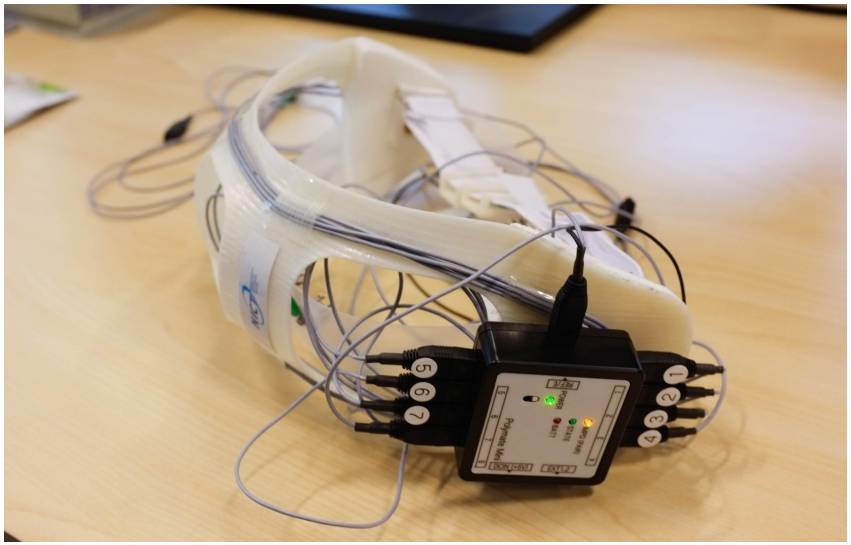
PROGRESS

Visual Application

- Able to display animated, colorful particles in simple shapes such as cones and cubes.
- Created 3D model using Maya in order to test importing objects via scripts. Importing works well, but will test with more complex objects next week, such as trees with detailed leaves and water since my end goal is to create an entire animated environment.
- Downloaded Mozart pieces to be used for the “happy” emotion, and began looking into synchronization of the particle movement with the rhythm.

EEG

- Tested EEG device functionality on myself via Bluetooth connection. The connection and data output happens almost instantaneously.
- Since the program and user manual are in Japanese, spent additional time to translate, learn its functions, and understand how the given sample code works.
- Installed MATLAB in order to run code. Ran into trouble running ork, so I will need to investigate this more next week.



EEG Sensor with 7 electrodes

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UPCOMING GOALS

Visual Application

- Make the application more flexible by accepting any .obj file to be imported so that particles appear at each vertex location in an animated fashion.
- Build more complex models on Maya to test the above.
- Complete minimal particle-music synchronization.
- Test my visualizations on the 3D wall near the end of next week.

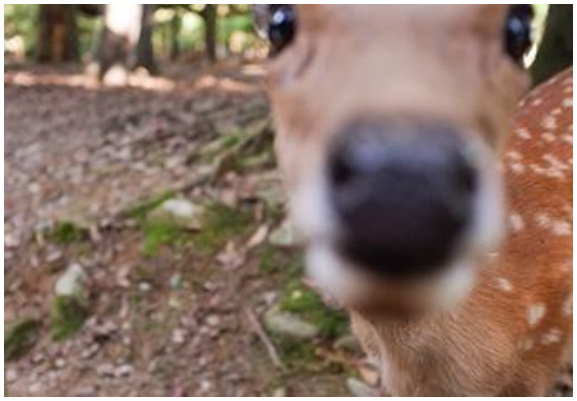
EEG

- Fix errors with running the code in MATLAB. If this doesn't work, then try working with the code written in C.
- Begin gathering data for analysis and filter out noise.
- Begin Fast Fourier Transformations of EEG data.
- Observe EEG output while wearing the device when inducing emotions through media such as video clips designed to make the viewer feel "happiness."

EXPERIENCING JAPANESE CULTURE

JUST A FEW OF THE ACTIVITIES FROM THIS WEEK

Feeding deer cakes to deer in Nara



Deer Selfie!

Exploring temples

Watching the sunset from the top of Nigatsu-do

Visiting Osaka Castle and learning about its history of sieges and wars

JAPANESE CUISINE

いただきます

Latte on a rainy day at work

Lunch at a green tea cafe

Excited to find boba in Japan!

Starbucks vanilla frappuccino

Green tea and red bean ice cream

First raw fish of the trip and it was delicious!

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ありがとうございました

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