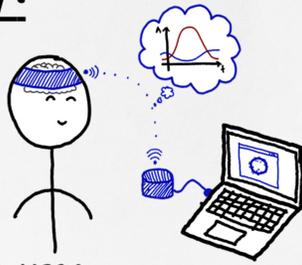


Summary:

OpenHEG uses Functional Near-Infrared Spectroscopy to measure the Hemodynamic Response within the brain of a user.



This measurement directly correlates to brain activity, which we can use to create neurofeedback loops for therapeutic treatments.

OpenHEG

DEMOCRATIZING NEUROSCIENCE

An open-source brain computer interface that makes neurofeedback accessible to all!

Team Name: Just Geoff



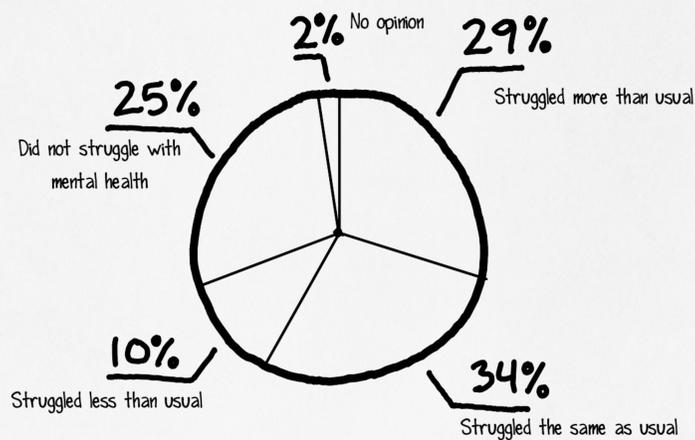
I'm Geoff McIntyre. I'm a Maker, Dancer, and Professional Dreamer. I designed OpenHEG as part of my mission to "Democratize Creativity".

Sponsors:
Prof. Eric Bogatin
ECEE Department

Mentors:
Andrew Goldstein
Brian Barrette
John Lettang

Problem:

Mental Health Struggles in the Past Year:



73% of Americans struggled with mental health in the past year

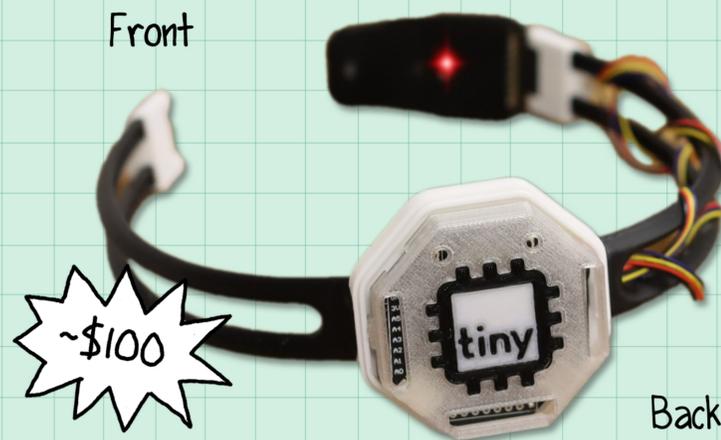
Average Cost of Therapy Session in Colorado:

\$162.30

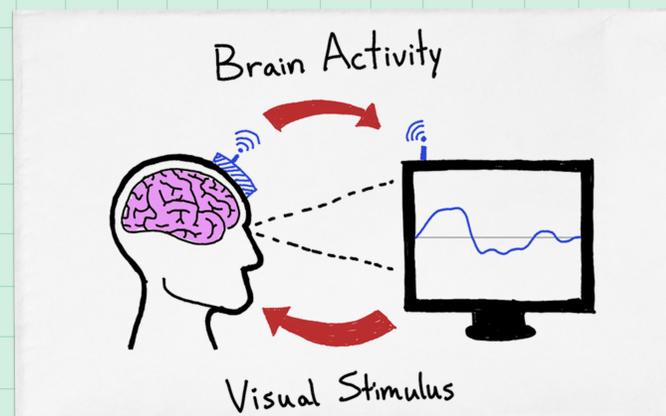
<https://www.redboxrx.com/pages/mental-health-infographics>

Solution:

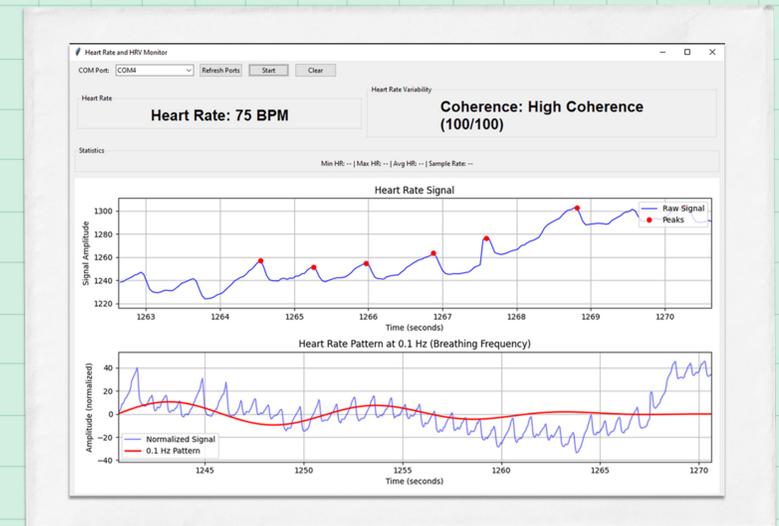
Physical Hardware:



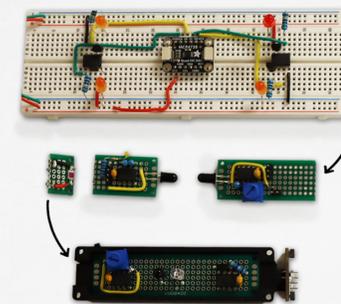
Neurofeedback Loop:



Software Interface:



Prototype 1



Prototype 2

