

Brain Wave Sleep System

Mentors: Dr. Patric Lockhart, Dr. Ahmed Zaki, Jay Melillo

- **Background:** Direct brain/computer interface is the near future
- **Project Summary:**
 - Design, model, and construct a wireless transceiver
 - Code software to collect, process, and visualize brain wave data from a Muse Headband or similar
 - End design will monitor brain waves to determine when wearer falls into a light / deep sleep, and relay a sleep trigger signal via the wireless transceiver to dim / turn off a light switch
 - 2 Students (1 EE, 1 CE)
- **Deliverables:** Final report & working prototype



Graphic courtesy of Amazon