Braille Reading and Training System

Ford, Maggie

Braille books are extremely hard to find as well as very bulky and heavy to carry around. The purpose of my project was to design and construct a refreshable single cell braille device, along with the software necessary, which can be used by someone to read books in braille or help them to learn the braille alphabet. Using some robotic servos, solenoids, switches, and a control board, I was able to construct my device. I then wrote a program in Visual Basic which read letters from a text file and moves the servos as necessary, thus closing the switches and energizing the solenoids, to display the appropriate braille representations. The software also allows the user to control both the speed and direction of the incoming text information. My design went through several iterations, but the final outcome accomplishes the desired task of providing an affordable device which will allow someone to read books in braille and learn the braille alphabet.

Awards Won:

Fourth Award of $500

International Council on Systems Engineering - INCOSE: Certificate of Honorable Mention