

Team: Druck Green & Andre' Walker

6.111 Final Project Abstract:

LED Pathfinder

The goal of this project is to wirelessly direct a land vehicle along a path pre-drawn with an LED wand. A camera will be positioned above the vehicle's movement area, and a user will trace a path beneath the camera using the LED wand. The FPGA interfacing with the camera will parse this data feed, and store the "path" in memory. A mounted LED will indicate the vehicle's position, and the FPGA will use this position to transmit appropriate path-following inputs to the vehicle's RC controller. Additional functionality will include choosing from multiple pre-drawn paths stored in memory.