Arduino Based GPS Data Logging System for Google Earth

By: Kenneth Mendenhall

Supervisor: Prof. Adriano Cavalcanti, PhD

Abstract

This project sought to implement a low budget postition tracking device that will record latutude / longitude data and save it to a file for future use.

Introduction

Arduino GPS used open source libraries to implement a software solution with minimal hardware cost, using publicly available code. With this, GPS data could be save into a file for Google Earth to read later.

Theory / Methodology

User side interface was developed along with Arduino code for the back end logic. The Arduino feeds GPS data to the computer, where the host program saves the data.

Results

Data was extracted and viewed inside Google Earth.

Future development will include looking at power consumption and getting better accuracy from the GPS module as well as looking at the limitations of the system.

Components

Edison with Breakout Board
GP-17340 GPS Module
XBee Pro Radios with Module Shields
Google Earth
Java (Netbeans IDE)







