GPS Coding and Wiring

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1   Introduction

This report will outline the wiring connections, circuitry, and programming for the NEO-6M GPS module to be used in the project. Note that this report is just one of the few methods and researches explored and carried out. This report will explain:

- Wire the NEO-6M GPS module to the Arduino UNO

- Get raw GPS data

- Parse raw data to obtain selected and readable GPS information

- Get location

The majority of the information in this report is taken from a tutorial online explaining the NEO-6M GPS module's usage with the Arduino Uno [1].

2   Wiring

Figure 1 shows the simple wiring configurations to setup the GPS module for the Arduino. The GPS module uses a 5V supply to VCC and the transmitting and receiving pins go to their respective opposites on the Arduino. A ground is of course needed too.

NEO-6M GPS Module	Wiring to Arduino UNO
VCC	5V
RX	TX pin defined in the software serial
TX	RX pin defined in the software serial
GND	GND

Figure 1: Wiring for the GPS to the Arduino

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[1] Anon, (2018). *Guide to NEO-6M GPS Module Arduino — Random Nerd Tutorials.* [online] Available at: `https://randomnerdtutorials.com/guide-to-neo-6m-gps-module-with-arduino/`.