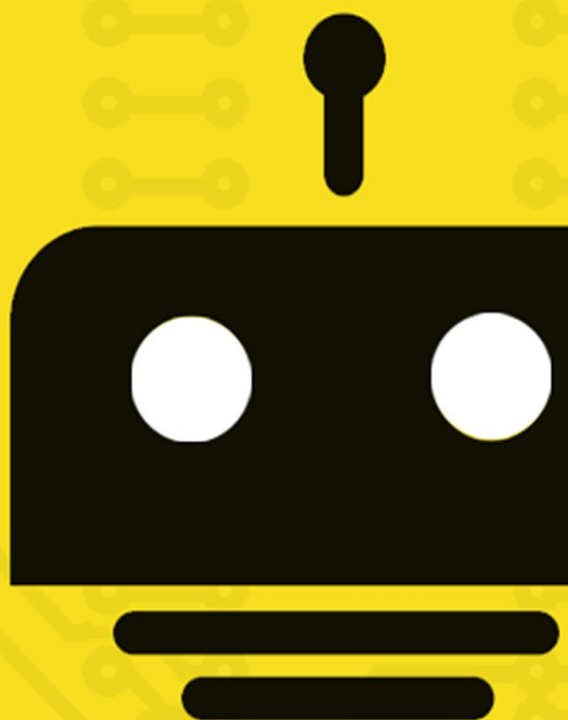


International

NodeBots Day

July 25 / Charleston, SC



A one day gathering for people
to learn, create, and discover NodeBots

nodebotschs.github.io

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Welcome to International NodeBots Day 2015

A one day gathering for people to learn, create, and discover NodeBots.

Come experience a full day of assembling, coding, and challenging your fellow attendees to a friendly battle or race of robots.

Mentors

- Calvin Webster
- Amanda Hodges
- Jeremy Martin
- Mark Funk
- Jason Frockenstein

Robots are fun?

- [Schedule of Activities](#)

Schedule of Activities

- 8:30 AM - 9:00 AM - Check In
- 9:00 AM - 9:10 AM - Introduction, Logistics and Sponsors
- 9:10 AM - 10:00 AM - NodeBots Workshop 101
 - What is in your kit
 - Setup and Claim your particle Core
 - Flash your core with voodoospark
 - Blink a LED with Johnny Five
- 10:00 AM - 12:00 AM - Build your SumoBot Jr
- 12:00 AM - 1:00 PM - Box Lunches
- 1:00 PM - 3:30 PM - Hack your Sumo Bot JR
- 3:30 PM - 4:00 PM - NodeBot ART Demos
- 4:00 PM - 4:30 PM - NodeBot Exhibition Demos
- 4:30 PM - 5:00 PM - NodeBot BattleBot Tournament

Particle Core Development Setup

- [Install Node.js and Particle CLI](#)
- [Particle Core Setup](#)

Install Node.js and Particle CLI

Node.js is an incredible platform that allows you to build things in javascript, which we will need in order to download and use the Particle CLI (Command Line Interface) which is the way you will be interacting with your hardware (Particle Core) to program your robot.

Depending on the operating system, you will need to follow specific directions, but generally you will:

1. Install [NodeJS](#) (Click Install)

Once Node.js is installed, you will also have available the Node Package Manager which is how you will install libraries and utilities that help you build and interact with your hardware/software.

2. Then install the Particle CLI

The Particle Command Line Interface is a tool written by the folks who also made your device. This tool allows you to connect, claim, and use your device, so you'll need to install it:

```
git clone git@github.com:spark/particle-cli.git
cd particle-cli
npm i . -g
```

1. To make sure that the installation worked, go ahead and try to login to your particle account by typing `particle login` (this will prompt you for your username and password.) This will actually create an account on particle.io which will allow you to manage your devices. [see Particle Setup](#)

For Windows Users

For windows users you may want to follow these instructions:

<https://community.particle.io/t/tutorial-particle-cli-on-windows-07-jun-2015/3112>

For Ubuntu Users

For ubuntu users you may want to follow these instructions:

<https://community.particle.io/t/how-to-install-the-spark-toolchain-in-ubuntu-14-04/4139>

Particle Core Setup

We want to setup the particle core via usb.

1. Plug in your usb cable to your computer and the particle core.
2. Run particle-cli setup

```
particle setup
```

1. Enter your email address and password, this will create an account on particle.io.
2. Detect your wifi, you should have a handout that contains the wifi info, use it to send your particle core the wifi information.

You should see the core light go from blinking blue to breathing cyan:

<http://docs.particle.io/core/connect/>

If you get any errors please let one of the mentors know.

1. Flash the core

Once your particle core is connected via wifi, we need to flash the core with the voodooospark cpp file

1. Checkout voodooospark

```
git clone https://github.com/voodootikigod/voodooospark.git
cd voodooospark
particle flash --usb firmware/voodooospark.cpp
```

1. Get your Device ID and Access Token

To get your device id simply Run

```
particle list
```

To get your access token

In you home directory there should be a folder called `.particle` and in that folder a file called `particle.config.json` - in that file should be your access token.

Sumobot Instructions

- [Hello World](#)
- [Assembly](#)
- [Connecting the brain \(Particle Core\)](#)

Assembly

Connecting the brain (Particle Core)

Coding Up Your New Robot!

Johnny Five is Alive

Running a script

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Resources/Links for Making Robots

What Now? What to do when Robot comes home.

Special Thanks and Sponsors
