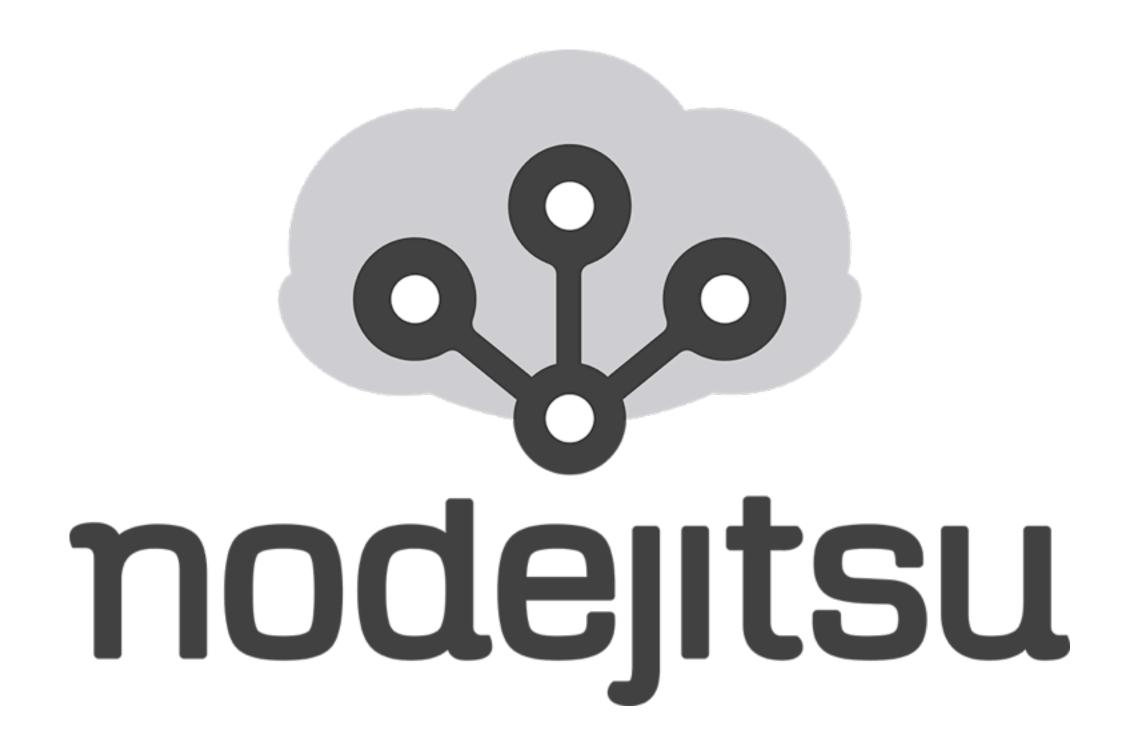


THE JSCONF 2013 NODEJITSU NODECOPTER



The Team

- Tim Koschützki
- Thorsten Ball
- Robin Mehner
- Felix Geisendörfer

Schedule

- 9:30am 10am Takeoff
- 10am 1pm Hacking
- 1pm 2pm Lunch (box lunches turkey, hoagie, chicken caesar, and veggie wraps)
- 2pm 5pm Hacking
- 5pm 6pm Demos (Bring your significant others & kids!)

History

The Drones

Wifi Access Point (Drone Number = WiFi Name)

• Runs Linux (telnet 192.168.1.1)

• 2 Cameras (720p front, 360p bottom)

The Drones

• Changing / Charging Batteries

Turn it upside down for emergency cutoff (kill switch)

• Download "AR Race 2" (iOS) or "AR.FreeFlight 2.3" (Android Google Play Store)

Programming

install node.js

npm install ar-drone

docs at: https://github.com/felixge/node-ar-drone

Programming

```
1 var arDrone = require('ar-drone');
2 var client = arDrone.createClient();
 client.takeoff();
 client
    .after(5000, function() {
     this.clockwise(0.5);
   })
    .after(3000, function() {
     this.stop();
 this.land();
   });
```

http://nodecopter.com/hack

Ask us if you have any questions / need help!

Repairs

• Drone is pretty robust, but still - be careful

Bring drone to us if you have a defect / suspect something to be misbehaving

Internet

• SSID: "AVT Event Technologoies" (jsconf/jsconf)

• Drones may cause interference

Ideas for Projects

Team Up With NodeBots

Collaborate with a team from next door!

Make the drone talk to a NodeBot

 Put a NodeBot on a NodeCopter! (peel off the bottom of the drone to get to the pins)

More Ideas

• Fly in a circle, eight or other pattern

Coordinate flight with another drone

Detect a face / follow that person (use node-opency)

More Ideas

Visualize music by flying to the beat

Hack into the firmware (via telnet)

The Line Following Challenge

Drone is placed at the beginning of the orange line, randomly rotated

Takeoff, follow the line, land in the black square

Hard Problem - fastest team wins a prize

Chandeliers

Do not hit the chandeliers!

• Do not hit the chandeliers!

• Do not hit the chandeliers!

Slides are available

https://github.com/nodecopter/jsconf-2013

Next

• Find a team (2 - 3 people)

Pickup a drone

Or: Meet at the water table to find a team

Questions?