





KΘΠ

# Node.js

**Dom + Otto**

# Dom Parise

Tech Chair - Kappa Theta Pi (ΚΘΠ)

Junior - Computer Science

# Otto Sipe

Exec. Board - Michigan Hackers

Senior - Computer Science

# History



Ryan Dahl

Creator ~2009



# What?

Set of Libraries + V8 JavaScript Runtime

# What?



+





# Why?

Non Blocking I/O

# Why?

Single-Threaded Event Loop



*Fancy, indubitably!*



*Screw this guy.*

Node.js is the **culmination**  
of well thought out, **open-**  
**source** technology.

Node.js is **easy to learn** and  
makes it simple to write  
**powerful** applications.

Don't be afraid of it.

# Install Node

[nodejs.org/download](https://nodejs.org/download)



# Run

```
node app.js
```

# Modules



# Install Module

```
npm install <module>
```

```
var http = require('http');
```

```
http.createServer(function (req, res) {  
    res.end("Hello, Michigan Hackers");  
}).listen(1024);
```

```
console.log("Starting Server");
```

```
var http = require('http');
```

Include the http module.

```
http.createServer(callback).listen(1024);
```

Create a server, listen on port 1024.

```
function (req, res) {  
    res.end("Hello, Michigan Hackers");  
}
```

End the response with text.



NO NEED TO REFRIGERATE

KRAFT

EASY  
Cheese

cheddar

Real  
Cheese

NET WT 8 OZ (226g)



```
var http = require('http');
```

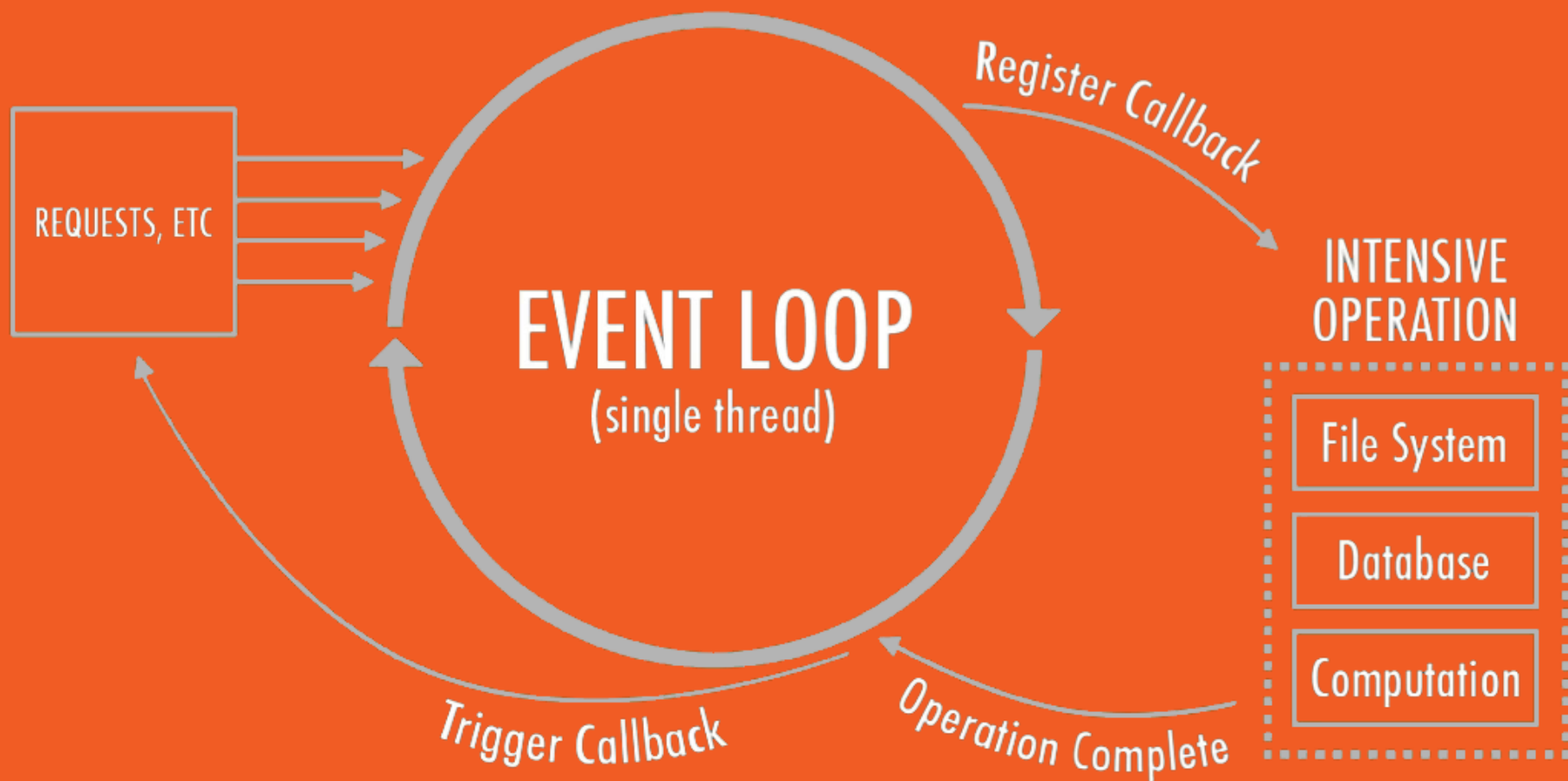
```
http.createServer(function (req, res) {  
    res.end("Hello, Michigan Hackers");  
}).listen(1024);
```

```
console.log("Starting Server");
```

# It's *Asynchronous*

Don't wait, come back when it's ready.





# It's *Asynchronous*

JavaScript's event loop keeps working during:  
network, database, filesystem access, etc

# Node.js Sucks At:

Things that are not async:  
static file serving, data manipulation,  
image resizing, crazy mathematics, etc

Node.js was built to excel at  
**asynchronous** network  
applications, and it does.

# Go Forth and Node!

Learn Node.js, explore NPM,  
and write cool applications!



Demos