

# THE NEW JAVASCRIPT ERA AND NODE.JS

PRODUCED BY: LUIGI MASELLI

and cut and paste

mostly

:P

# ABSTRACT

# /ME

hackerpreneur =~ Ruby/JS/HTML5/CSS3 Developer, CS  
degree @ Unito, SEO, blogger, Linux/Unix fan, techno-geek,  
minimalist, OpenData & OpenFuffa demistifier, freelance

## Twitter Place Finder

Susa (Susa, TO) ×

A map showing the area around Susa, Italy. It highlights several locations where tweets were posted, including Novalesa, Venaus, Gravere, and Meana di Susa. A callout box from Gianni indicates he is at Mamma's House.

**Gianni**  
I'm at Mamma's House [pic]: <http://t.co/7fStqBvYRu>

## Susa

(Susa, TO)

There are 15 tweets in this area, you can also try the map or other places nearby: [Bardonecchia](#), [Avigliana](#), [Trana](#).

[★](#) [Map](#) [Tweet](#) { 182 }

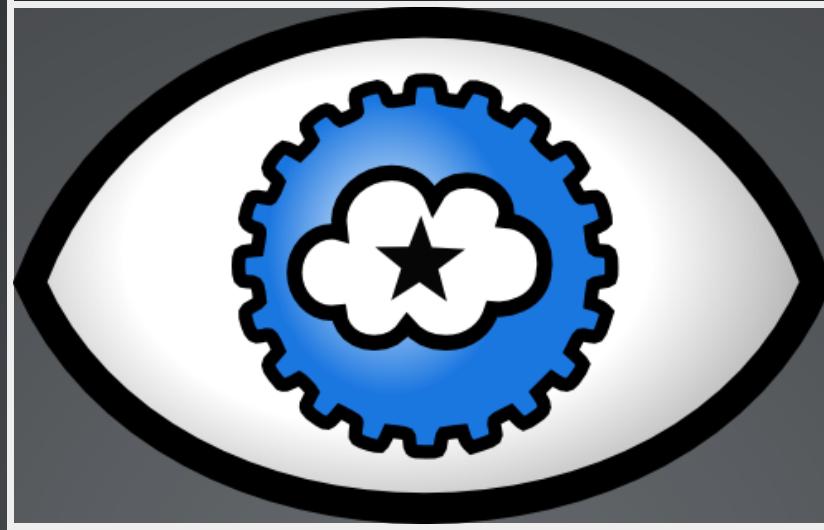
**Federico Surace:** In poche parole. Barcollo ma non mollo.  
2 days ago

**Gianni:** I'm at Mamma's House  
<http://t.co/EkabkCFbcG>  
2 days ago

**Gianni:** I'm at Susa (Susa, TO)  
<http://t.co/J1xen2jq6e>  
2 days ago

<http://twitter-place-finder.grigio.org>

(N/A in China, Israel, Mid-East)



<http://openfuffa.grigio.org>  
Slides => <http://grigio.org/openfuffa/index.html>



Open Geek Meeting

<http://ogm.herokuapp.com>

# ~ JAVASCRIPT HISTORY

- 1995 - Javascript birth - Brendan Eich (Netscape) != Java
- 1996 - Java write-once-run-everywhere (debug everywhere)
- 1996 - ECMAScript standardization begins
- 1999 - Geocities Gold Era, Web Browsers War I,..

# GEOCITIES ERA



# ~ NEW JAVASCRIPT HISTORY

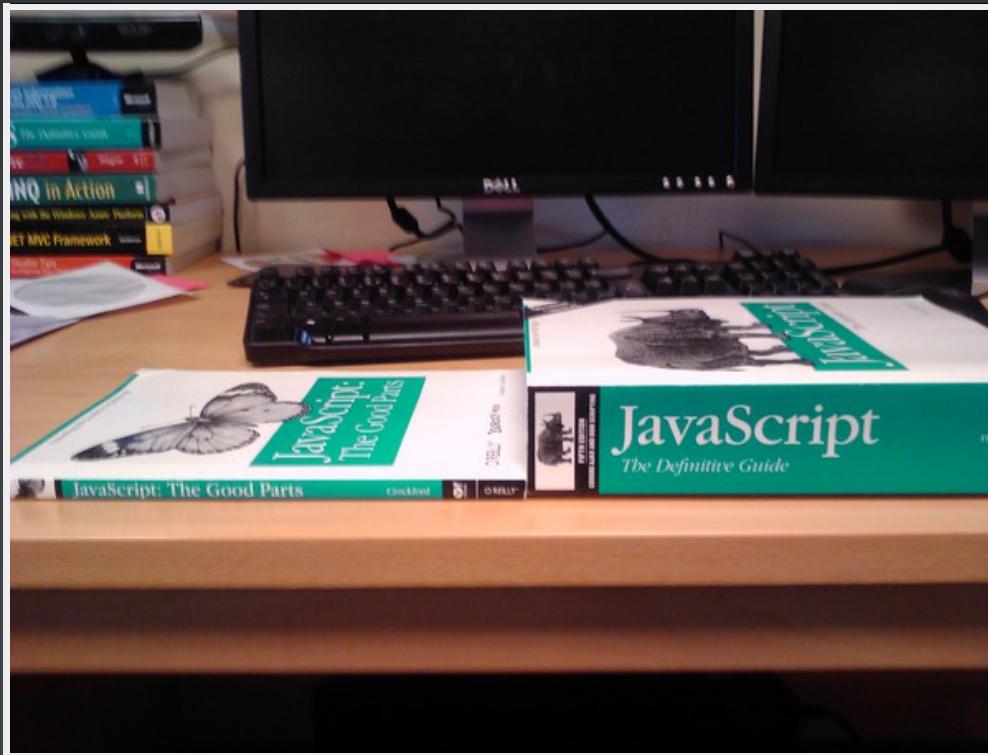
- 2006 - jQuery =~ Javascript - John Resig
- 2008 - JavaScript: The Good Parts - O'Reilly Media
- 2009 - Node.JS - Javascript server-side - Ryan Dahl (Joyent)
- 2009 - Coffeescript transcompiler to js, influenced ES6 - Jeremy Ashkenas
- 2012 - BatNaN

# I KNOW PROGRAMMING, I KNOW JAVASCRIPT



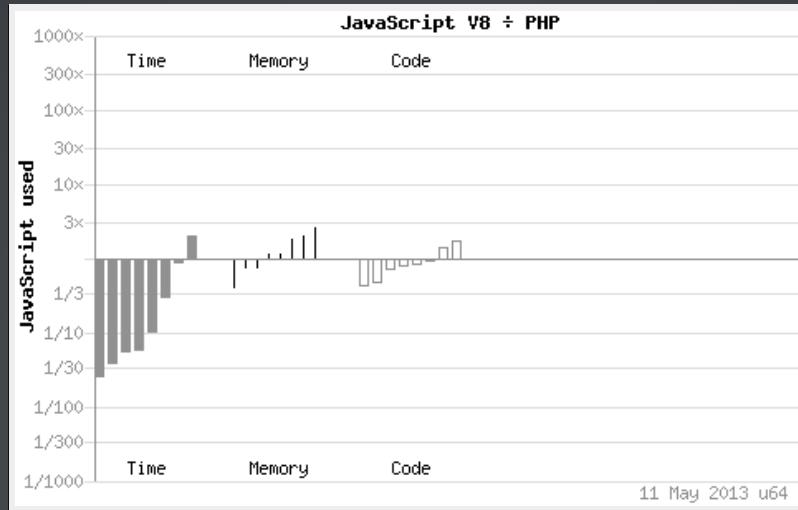
**NO LOVE FOR JAVASCRIPT, NOT A LOGO,  
JAVASCRIPT THE GOOD PARTS,  
COFFEESCRIPT TRIES TO FIX IT NOW ..**

BatNAN <https://www.destroyallsoftware.com/talks/wat>



# HOWEVER...

# JAVASCRIPT IS THE FASTEST SCRIPTING LANGUAGE



Also because it runs on the client.

[http://benchmarksgame.alioth.debian.org/u64/benchmark.php?  
test=all&lang=v8&lang2=php&data=u64](http://benchmarksgame.alioth.debian.org/u64/benchmark.php?test=all&lang=v8&lang2=php&data=u64)

# JAVASCRIPT IS EVERYWHERE

Desktop, tablet, smartphone(Browser, WebOS), server.

No devtools needed.

**NODE.JS = V8 + LIBS (HTTP, CRYPTO,  
FILESYSTEM, PROCESS, ZLIB)**

# HELLO-WORLD.JS # SCRIPTING

```
#!/usr/bin/env node

process.on('exit', function(code){ // Integrated EventEmitter
  console.log("code " + code);
});

setTimeout(function(){ // Like in the browser
  console.log('world ' + process.env['MYVAR']);
}, 1000);

console.log("Hello");
```

```
chmod +x hello-world.js
MYVAR=netstudent ./hello-world.js # quiz: output???
```

```
Hello
world netstudent
code 0
```

# HELLO-WORLD2.JS # WEB SERVER

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

var server = http.createServer(function (request, response) {
  response.writeHead(200, {"Content-Type": "text/plain"});
  response.end("Hi client!\n"); // Output to client
});

// Listen on 0.0.0.0:8002
server.listen(8002);

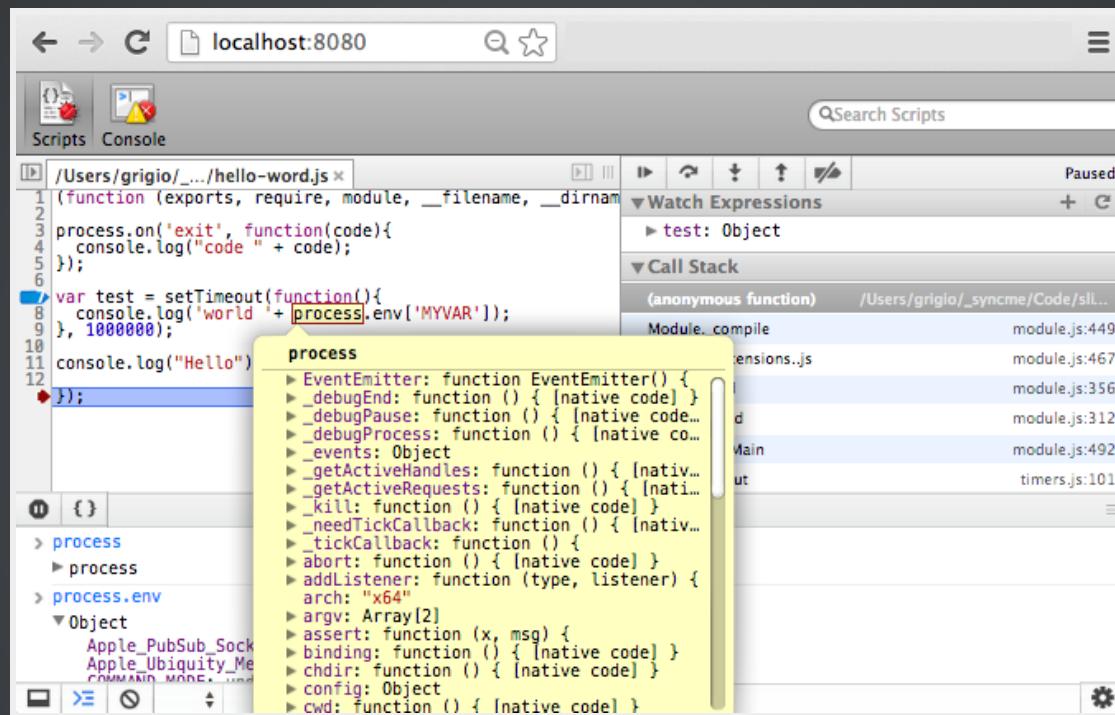
// Output on server
console.log("Server running at: "+server.address().address+":"+server.addr
```

```
node hello-world2.js&
curl localhost:8002 # quiz: output???
```

```
Hi client
```

```
nodemon --debug-brk hello-word.js &; node-inspector # quiz: output???
```

# WOW! DEBUG EVERYWHERE: NODE-INSPECTOR



# NPM (NODE PACKAGE MANAGER)

- package.json
- npm install # -g
- node\_modules
- ready! :)

# NPM (COMMONJS) VS REQUIREJS (AMD) VS ES6 HARMONY

```
// Node CommonJS
var oz = require('os');
oz.uptime();
```

forget \$(document).ready() , js on demand

```
// # RequireJS - define jquery , preprocessors for sass, coffeescript, han
require(['./jquery', 'async!http://maps.google.com/maps/api/js?sensor=fals
    $('body').hide();
    console.log(google.maps.version);
});
```

```
// # ES6 - a static module reference
import 'math' as M;

// reify M as an immutable "module instance object"
alert("2π = " + M.sum(M.pi, M.pi));
```

# OTHER TOOLS

Grunt (build system, ES6 transpiler), Bower (AMD package manager for browser js)

Express (Sinatra), sails, socketio

# METEOR

JS on the client, on the server, on db (MongoDB)  
Easy Full-Stack framework, Live data sync, Latency  
compensation, Privileged Environment.

# RECAP

- No alternative in client/browser, many frontend devs already learnt it
- Javascript is fast and everywhere multipurpose language
- Code reuse on the client and on the server
- Still evolving but already mature for realtime/websocket tasks

# CREDITS

<http://addyosmani.com/writing-modular-js/>

<http://en.wikipedia.org/wiki/JavaScript>

<http://images.google.com> <http://hakim.se>

[http://wiki.ecmascript.org/doku.php?id=harmony:modules\\_examples](http://wiki.ecmascript.org/doku.php?id=harmony:modules_examples)

# THANKS!



<http://grigio.org/newjs/index.html>

## CONTACTS

twitter: [@grigi0](https://twitter.com/grigi0)

blog: <http://grigio.org>