

# Why Performance Matters

And what you can do about it

# Who Am I?

Discovered computers in high school

Worked as a software engineer, project lead and manager.



Followed the jobs from Data General->Wang Labs->Motorola-Codex->Cabletron->Bay Networks->Nortel Networks.

Changed courses and helped my wife run Island Creations, a Bead Store and more... Made jewelry and taught classes.

Decided it was time to go back to my Tech roots and picked the Web as my playground.

# Some Numbers

- Walmart saw *2 percent increase* in conversion rates for *every 1 second improvement* in page load times. [Kinsta.com]
- Strange Loop Networks puts it like this: a one-second delay can cost you *7% percent of sales*. [copyblogger.com]

# The Survey says

- 3% says they would wait less than 1 second [KISSMetrics]
- 16% would wait 1-5 seconds [KISSMetrics]
- Desktop average load time is 7 seconds [byreputation.com]
- Mobile is 10-11 seconds [byreputation.com]

Remember --- People are more apt to talk about their bad experiences

# The Gold Standard

DNS response : <200ms

SpeedIndex : <1 sec

<http://www.webpagetest.org/>

PageSpeed Insights:

85 for Mobile

90 for Desktop

<http://developers.google.com/speed/pagespeed/insights/>

So What can we do about it?

**Reduce...Reduce...Reduce**

# Mobile-first Design

Huh!

Start with the worst case first

Use responsive design

# Reduce DNS lookup

- Don't use redirects
- Get a good host

## **.htaccess file**

Make it as small as possible



# Reduce requests

Let's look at [webpagetest.org](http://webpagetest.org)

# Reduce size (step 1)

- Remove whitespace (minify) - uglify (js), cssmin, htmlmin
- Compress the files - the server does this (mod\_deflate)
- Compress images - imagemin
- Move scripts to bottom of page (they block)

## **Reduce size/# of requests (Step 2)**

**Uncss** - goes through your html file(s) and creates a css files with just the styles used

**Concatenate** - combines multiple files into one. (Like all these js files)

**CriticalCSS** - Inline styles above-the-fold

# Tools to help

Grunt/Gulp - Task Runners (a whole talk)

Use these to automate your workflow.

I will be putting my gruntfiles on github soon.

# Wordpress specific

- Plugins can achieve minifying files and compressing images
- Autoptimize is one plugin that does a lot of things listed
- Caching plugins can help
- Uncss - ???? Yes/No

Thanks for listening...

Questions/comments.....

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