@davidmarkclem

perf stories

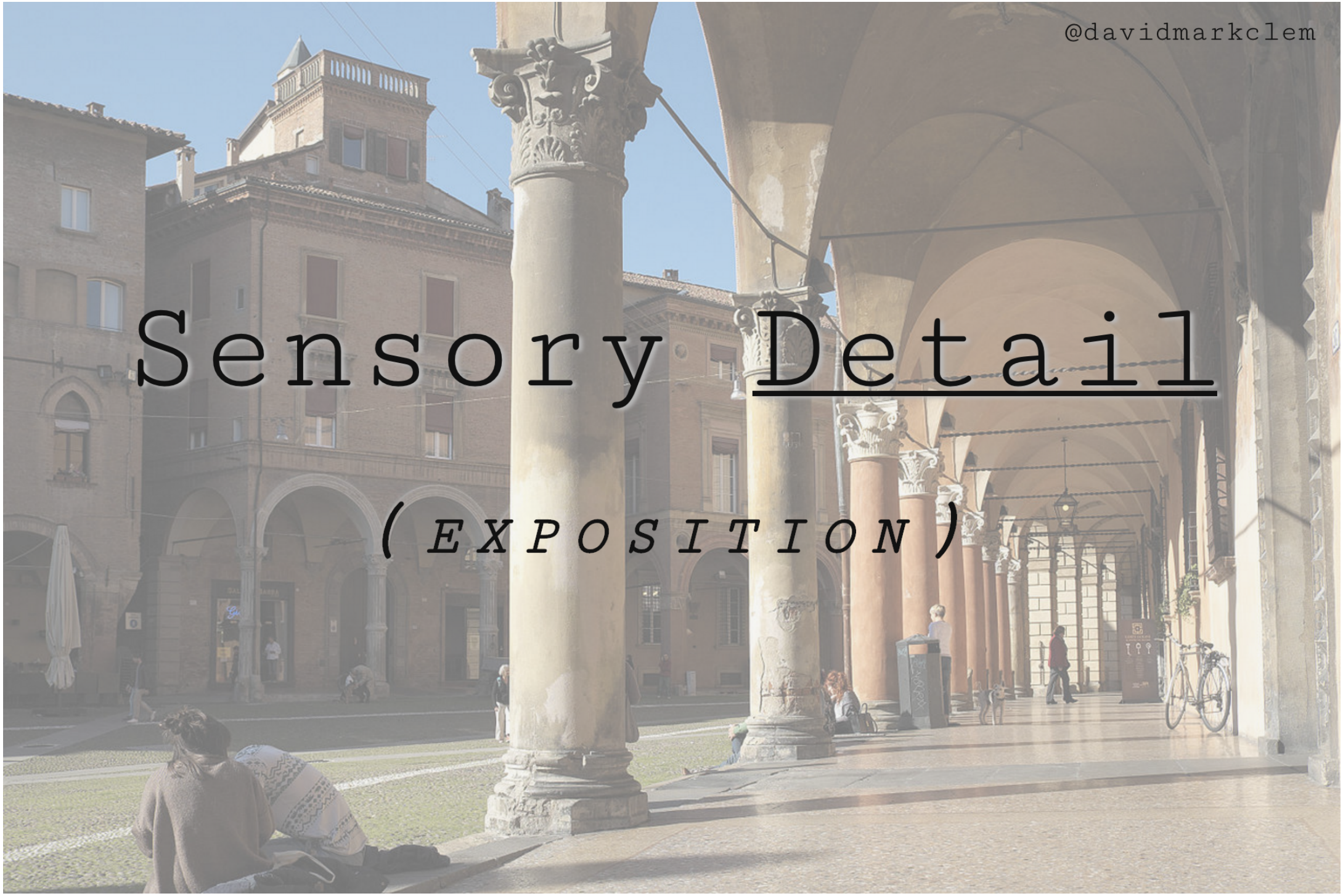
davidmarkclements.github.io/perf-stories

Framing Device

Narrative Techniques

Flashback: January 2016

The Frame Story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Sensory Detail
(EXPOSITION)

telling

a story

within

a story

Narrative Hook

via hypodiegesis


THE TIMES
THE SUNDAY TIMES
Know your times
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The network card...
became the bottleneck!
http://www.nearform.com/
nodecrunch/client-case-
study-news-uk

Moral:

Comment Optimized Code

Ticking Clock Scenario

Ticking Clock Scenario


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NET-A-PORTER
http://www.nearform.com/nodecrunch/client-case-study-net-a-porter

Our Cambrian Explosion

Our Cambrian Explosion

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Deus Ex Machina

The 0x Story

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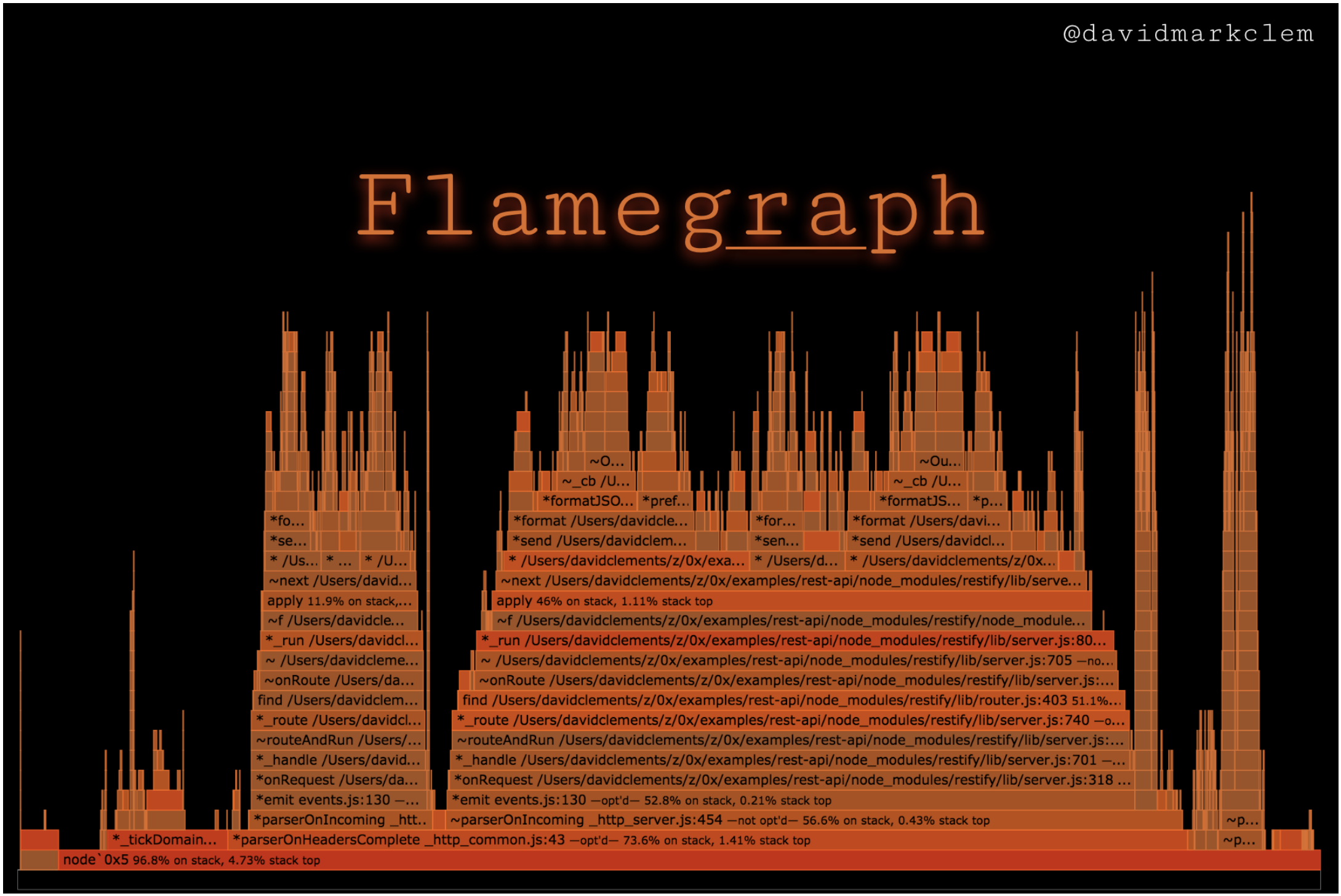
Flamegraph



perf-sym

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Fighting Red Herrings

Autocannon Origins

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ab & wrk

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Science & Magic

The Birth of Pino

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Science & Magic

The Birth of Pino

Deliver us from eval #1

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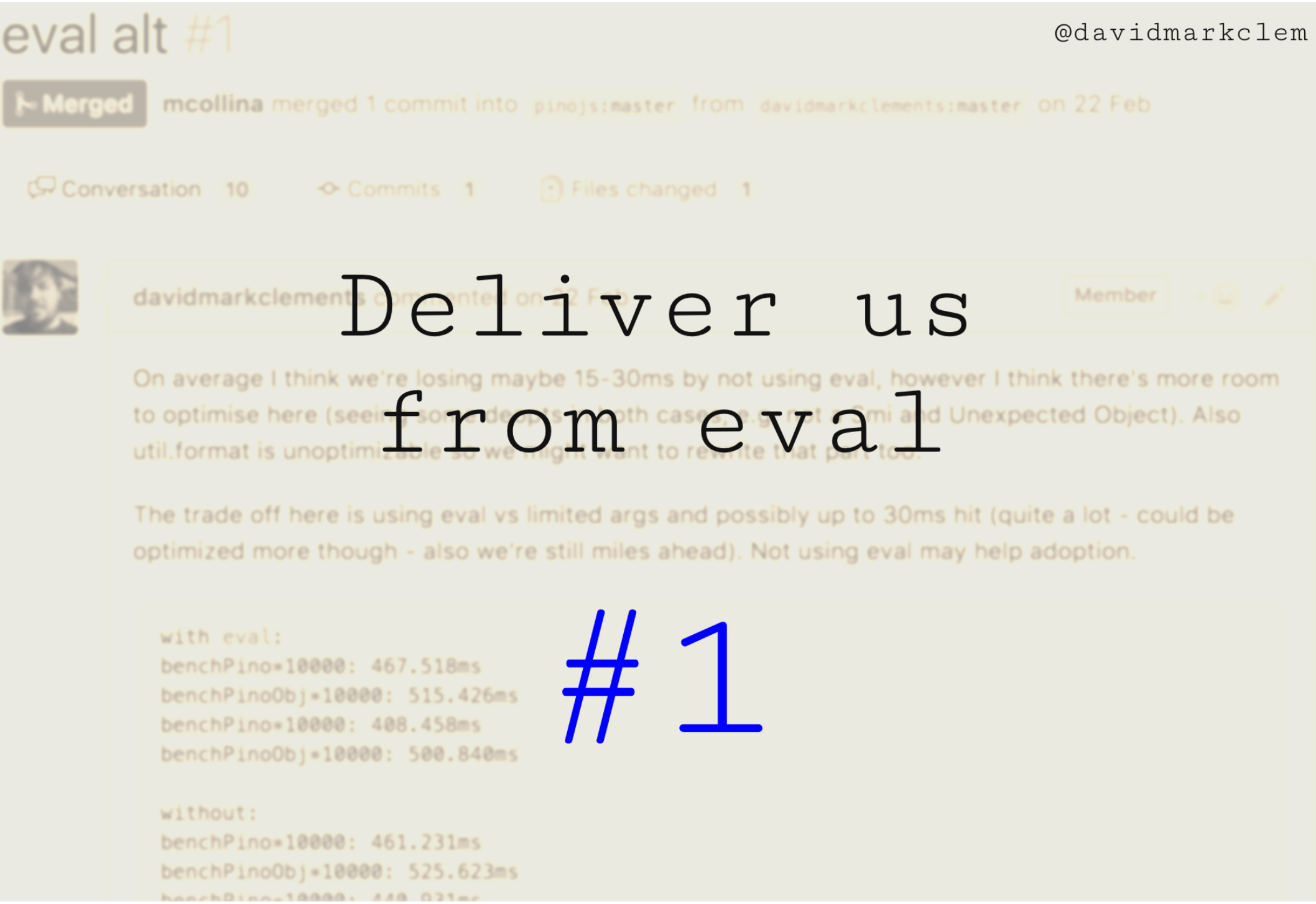

20-25% speed increase #2

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Merged mcollina merged 1 commit into master from stringify-opt on 7 Mar

Conversation 0 Commits 1 Files changed 2

davidmarkclements commented on 7 Mar Member

"String Theory"

Flamegraph shows the bottleneck at stringify (from JSON.stringify)

#2

We can also see the stringify function is not optimized (hence, slow)

By manually creating the initial string, we remove the stringify bottleneck

Killing Time #5

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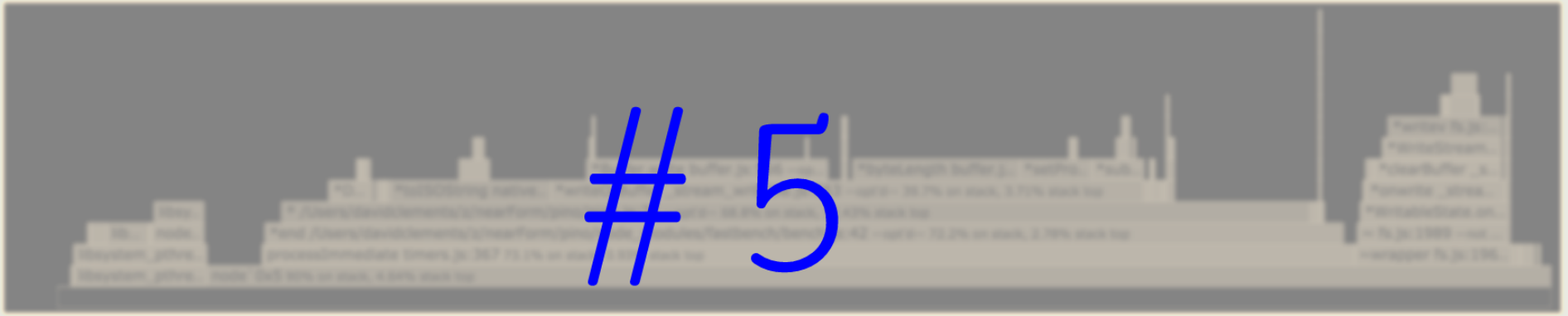
timestamp opt (20-25% speed increase) #5

Merged mcollina merged 2 commits into master from timestamp on 9 Mar

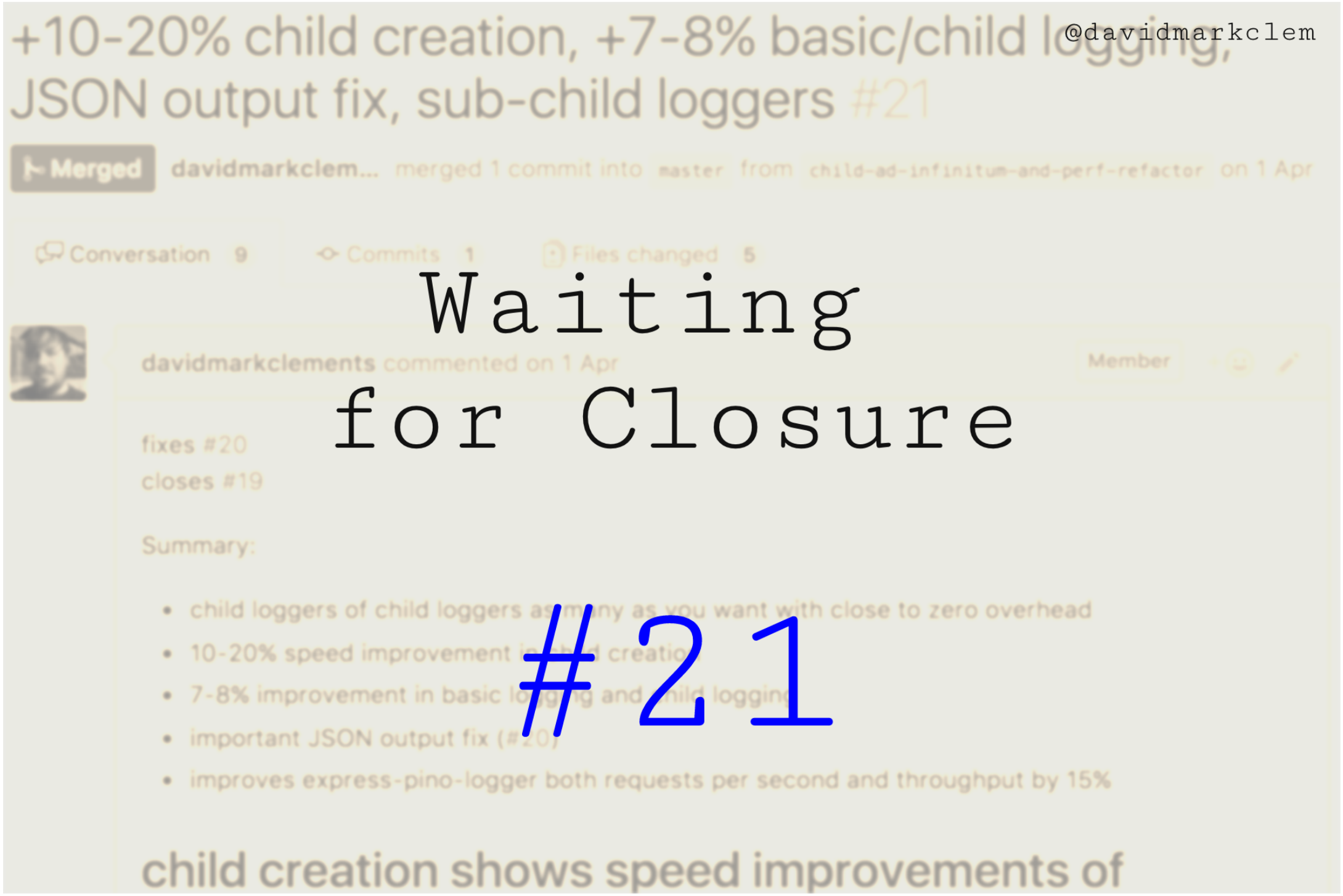
Conversation 4 Commits 2 Files changed 5

davidmarkclements commented on 9 Mar Member

When we profile an isolated benchmark with ... (npm.im/0x) (again) we can see that toISOString is hot (10.8% on stack 8.72% on top of stack)



If we alter out timestamps from ISO to epoch, we get the following flamegraph showing that `Date.now()` is far less expensive that `Date.prototype.toISOString`



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Waiting for Closure

#21

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Accidental Extremism

#24

```
module.exports = function flatstr(s) {
  Number(s)
  return s
}
```

flatstr

Behind the Veil

Of whom we speak not

Behind the Veil

Of whom we speak not

Rigging

Realtime Profiling

Epilogue

A Prophecy

fin