

# How to ruin a technical talk

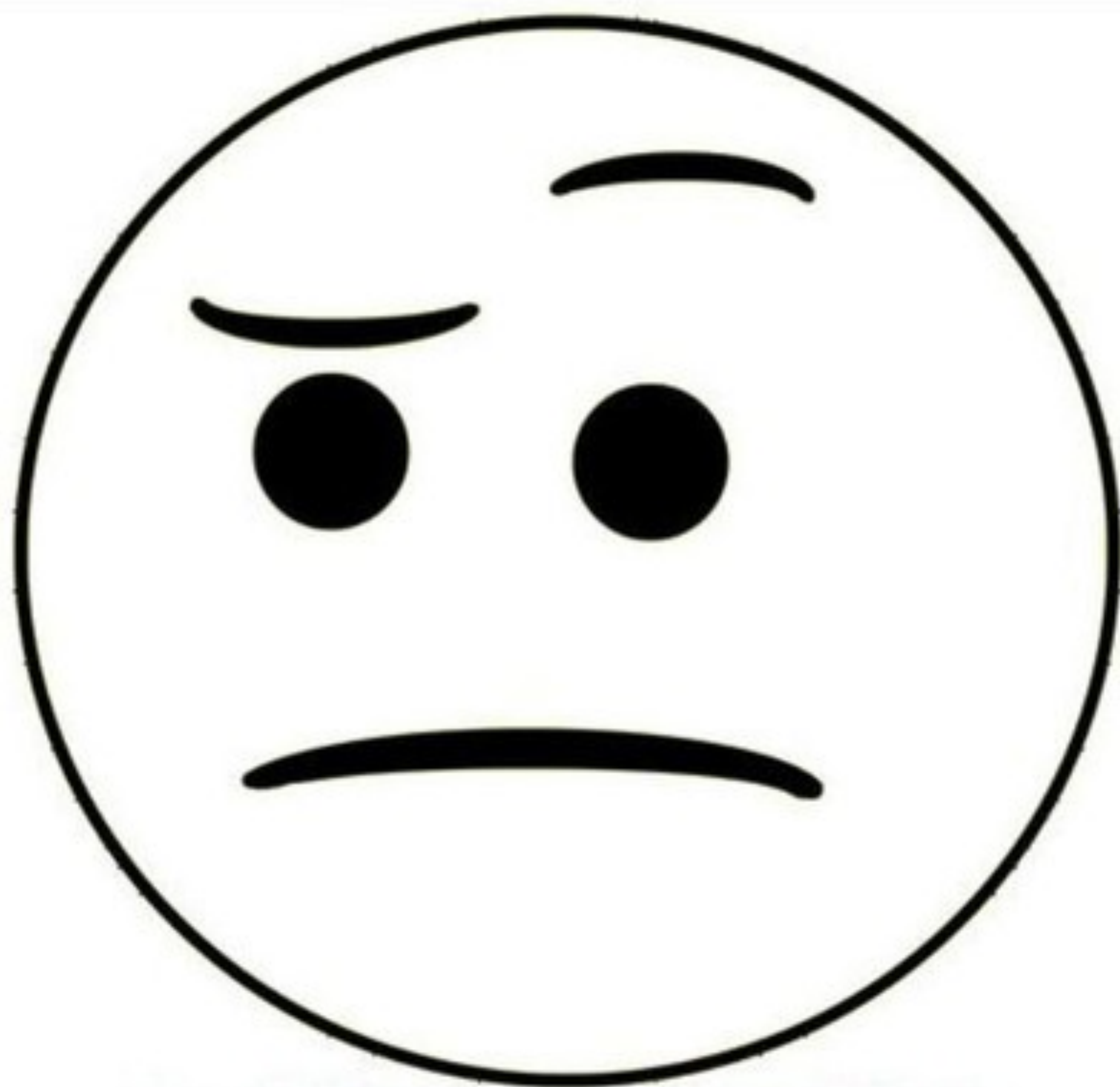
Ilya Chesnokov

I visited some conferences

Listened to some talks

And ruined many of my own ones

[illegible]



**I know how to ruin  
a technical talk!**

**So how to do it?**

**As little**

**As little**

font



**As little**

font

as you can



**As long  
LISTS  
as you can!**

# A very long list

Main article: [Morgan Freeman on screen and stage](#)

- [Brubaker](#) (1980)
- [Marie](#) (1985)
- [That Was Then... This Is Now](#) (1985)
- [Street Smart](#) (1987)
- [Glory](#) (1989)
- [Driving Miss Daisy](#) (1989)
- [Lean on Me](#) (1989)
- [Johnny Handsome](#) (1989)
- [Robin Hood: Prince of Thieves](#) (1991)
- [Unforgiven](#) (1992)
- [The Shawshank Redemption](#) (1994)
- [Outbreak](#) (1995)
- [Seven](#) (1995)
- [Chain Reaction](#) (1996)
- [Moll Flanders](#) (1996)
- [Amistad](#) (1997)
- [Kiss the Girls](#) (1997)
- [Deep Impact](#) (1998)
- [Nurse Betty](#) (2000)
- [Along Came a Spider](#) (2001)
- [The Sum of All Fears](#) (2002)
- [High Crimes](#) (2002)
- [Bruce Almighty](#) (2003)
- [Million Dollar Baby](#) (2004)
- [Unleashed](#) (2005)
- [An Unfinished Life](#) (2005)
- [Batman Begins](#) (2005)
- [Lucky Number Slevin](#) (2006)
- [10 Items or Less](#) (2006)
- [Evan Almighty](#) (2007)
- [Gone, Baby, Gone](#) (2007)
- [The Bucket List](#) (2007)
- [Feast of Love](#) (2007)
- [Wanted](#) (2008)
- [The Dark Knight](#) (2008)
- [Invictus](#) (2009)
- [RED](#) (2010)
- [Dolphin Tale](#) (2011)
- [The Dark Knight Rises](#) (2012)
- [The Magic of Belle Isle](#) (2012)
- [Olympus Has Fallen](#) (2013)
- [Oblivion](#) (2013)
- [Now You See Me](#) (2013)
- [Last Vegas](#) (2013)
- [The Lego Movie](#) (2014)
- [Transcendence](#) (2014)
- [Lucy](#) (2014)
- [Dolphin Tale 2](#) (2014)
- [Momentum](#) (2015)
- [Ted 2](#) (2015)
- [London Has Fallen](#) (2016)
- [Now You See Me 2](#) (2016)
- [Going In Style](#) (2017)
- [Just Getting Started](#) (2017)
- [The Nutcracker and the Four Realms](#) (2018)
- [Angel Has Fallen](#) (2019)

**More text  
on one slide!**

**Let people read!**



In **mathematics**, **infinitesimals** are things so small that there is no way to measure them. The insight with exploiting infinitesimals was that entities could still retain certain specific properties, such as **angle** or **slope**, even though these entities were quantitatively small.<sup>[1]</sup> The word *infinitesimal* comes from a 17th-century **Modern Latin** coinage *infinitesimus*, which originally referred to the "infinite-th" item in a sequence. Infinitesimals are a basic ingredient in the procedures of infinitesimal **calculus** as developed by **Leibniz**, including the **law of continuity** and the **transcendental law of homogeneity**. In common speech, an infinitesimal object is an object that is smaller than any feasible measurement, but not zero in size—or, so small that it cannot be distinguished from zero by any available means. Hence, when used as an adjective, "infinitesimal" means "extremely small". To give it a meaning, it usually must be compared to another infinitesimal object in the same context (as in a **derivative**). Infinitely many infinitesimals are summed to produce an **integral**.

The concept of infinitesimals was originally introduced around 1670 by either **Nicolaus Mercator** or **Gottfried Wilhelm Leibniz**.<sup>[2]</sup> **Archimedes** used what eventually came to be known as the **method of indivisibles** in his work *The Method of Mechanical Theorems* to find areas of regions and volumes of solids.<sup>[3]</sup> In his formal published treatises, Archimedes solved the same problem using the **method of exhaustion**. The 15th century saw the work of **Nicholas of Cusa**, further developed in the 17th century by **Johannes Kepler**, in particular calculation of area of a circle by representing the latter as an infinite-sided polygon. **Simon Stevin**'s work on decimal representation of all numbers in the 16th century prepared the ground for the real continuum. **Bonaventura Cavalieri**'s method of indivisibles led to an extension of the results of the classical authors. The method of indivisibles related to geometrical figures as being composed of entities of **codimension** 1. **John Wallis**'s infinitesimals differed from indivisibles in that he would decompose geometrical figures into infinitely thin building blocks of the same dimension as the figure, preparing the ground for general methods of the integral calculus. He exploited an infinitesimal denoted  $1/\infty$  in area calculations.

The use of infinitesimals by Leibniz relied upon heuristic principles, such as the law of continuity: what succeeds for the finite numbers succeeds also for the infinite numbers and vice versa; and the transcendental law of homogeneity that specifies procedures for replacing expressions involving inassignable quantities, by expressions involving only assignable ones. The 18th century saw routine use of infinitesimals by mathematicians such as **Leonhard Euler** and **Joseph-Louis Lagrange**. **Augustin-Louis Cauchy** exploited infinitesimals both in defining **continuity** in his *Cours d'Analyse*, and in defining an early form of a **Dirac delta function**. As Cantor and Dedekind were developing more abstract versions of Stevin's continuum, **Paul du Bois-Reymond** wrote a series of papers on infinitesimal-enriched continua based on growth rates of functions. Du Bois-Reymond's work inspired both **Émile Borel** and **Thoralf Skolem**. Borel explicitly linked du Bois-Reymond's work to Cauchy's work on rates of growth of infinitesimals. Skolem developed the first non-standard models of arithmetic in 1934. A mathematical implementation of both the law of continuity and infinitesimals was achieved by **Abraham Robinson** in 1961, who developed **non-standard analysis** based on earlier work by **Edwin Hewitt** in 1948 and **Jerzy Łoś** in 1955. The **hyperreals** implement an infinitesimal-enriched continuum and the **transfer principle** implements Leibniz's law of continuity. The **standard part function** implements Fermat's **adequacy**.

**Smaller font for code!**



```

sub hide { push @{shift->hidden}, @_ }

sub is_hidden {
  my ($self, $method) = @_;
  my $h = $self->{hiding} ||= {map { $_ => 1 } @{$self->hidden}};
  return !($h->{$method} || $method =~ /^_/ || $method =~ /^[A-Z_]+$/);
}

sub lookup { ($_[0]{reverse} //=$_[0]->_index)->{$_[1]} }

sub match {
  my ($self, $c) = @_;

  # Path (partial path gets priority)
  my $req = $c->req;
  my $path = $c->stash->{path};
  if (defined $path) { $path = "/$path" if $path !~ m!^/! }
  else { $path = $req->url->path->to_route }

  # Method (HEAD will be treated as GET)
  my $method = uc($req->url->query->clone->param('_method') || $req->method);
  $method = 'GET' if $method eq 'HEAD';

  # Check cache
  my $ws = $c->tx->is_websocket ? 1 : 0;
  my $match = Mojolicious::Routes::Match->new(root => $self);
  $c->match($match);
  my $cache = $self->cache;
  if (my $result = $cache->get("$method:$path:$ws")) {
    return $match->endpoint($result->{endpoint})->stack($result->{stack});
  }

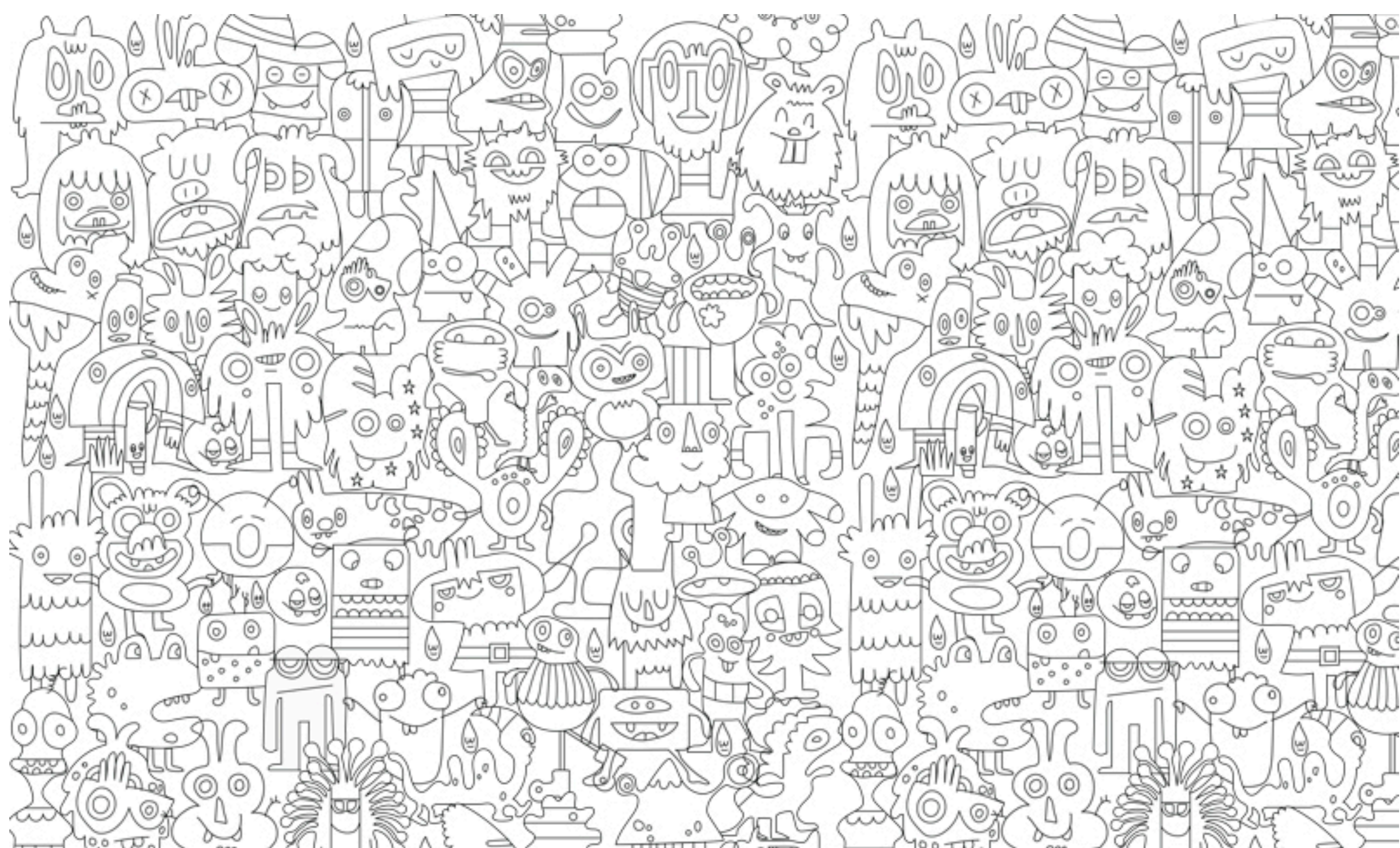
  # Check routes
  $match->find($c => {method => $method, path => $path, websocket => $ws});
  return unless my $route = $match->endpoint;
  $cache->set(
    "$method:$path:$ws" => {endpoint => $route, stack => $match->stack});
}

```

Font color - closer  
to background's!

**Big diagrams  
&  
small elements!**







**Technical stuff**

**Discharge your laptop!**

**Forget your adapter!**

■ ■ ■

Speak too quietly  
...or too quickly

Be incompetent  
Don't have  
an introduction  
...or a summary

Have too long  
introduction

Show your back  
to the audience

Get seriously  
out of time



**Loose your slides!**

**Forget to come!**



**On survey scores...**

**Your score  
lets speaker know  
IF  
their talk was ruined**

**Please,  
please, please!**

**Participate  
in the survey!**

**Your score  
doesn't let speaker know  
WHY  
their talk was ruined**



**Please,  
please, please!**

**Write  
productive comments!**

**Thank you!**