#### All Code Sucks

Why Bad Code is Everywhere and What to Do About It

Joe J Collins j.collins@zengenti.com linkedin.com/in/joejcollins



21 March 2024

#### What is sucky code?

"Programs are meant to be read by humans and only incidentally for computers to execute."

— Donald Knuth

"It is better to have clean code that doesn't work than crap code that does."

— Robert C. Martin

#### The Great Hunt for Non Sucky Code





























International Commission on Illumination Commission Internationale de l'Eclairage Internationale Beleuchtungskommission

#### Why Code Sucks The statistics favour of suck

Half of everything is below average

#### Why Code Sucks The statistics favour of suck

- Half of everything is below average
- Sturgeon's Revelation

#### Why Code Sucks The statistics favour of suck

- Half of everything is below average
- Sturgeon's Revelation
- The 2 Year Old Programmer Problem

Structure of Software Startups

- Structure of Software Startups
- Summer Student Projects

- Structure of Software Startups
- Summer Student Projects
- Prototypes in Production

- Structure of Software Startups
- Summer Student Projects
- Prototypes in Production
- The Agile Manifesto

- Structure of Software Startups
- Summer Student Projects
- Prototypes in Production
- The Agile Manifesto
- New projects = New programmers

· Availability bias

- · Availability bias
- The Illusion of Explanatory Depth

- · Availability bias
- The Illusion of Explanatory Depth
- Parkinson's Law of Triviality

- Availability bias
- The Illusion of Explanatory Depth
- Parkinson's Law of Triviality
- The Lake Wobegon Effect

#### What Not To Do



CODE MOCKING IS AN ENGINEERING TRADITION. IT HAPPENS WHENEVER A SOFTWARE PROJECT IS HANDED TO A NEW ENGINEER.













#### What To Do Based on the work of Michael Feathers

- Put the code in a vice (a test harness)
- Get ahead of the offending code with a feature flag
- Side by side rewrite

# The Challenge Where I need your help

"It's not that hard..."

— Billy Beane

"It's incredibly hard"

— Ron Washington