



AN INTRODUCTION TO
SANE OPERATIONS

WHO?

- James Nugent - Hashicorp, Boundary, EventStore
- Paul Stack - BMC, OpenTable
- Zachary Schneider - BMC, Boundary, Rackspace
- Seth Paskin - BMC, Entrepreneur, DELL

ALL YOU NEED TO KNOW.

- My dog's middle name is: DevOps

AMERICAN KENNEL CLUB	
NAME	NUMBER
KLAUSE DEVOPS SCHNEIDER	RN26756109
BREED	SEX
AIREDALE TERRIER	MALE
COLOR	DATE OF BIRTH
BLACK & TAN	JUNE 3, 2014
SIRE	
C&C SIR DUKE FOR DAISY RN22105912 07-12	
DAM	
SIMPSON'S EMMA RN20640503 11-13	
BREEDER	
SHERRY CARTER	



SO, WHEN CAN I HAVE THAT?





WHY IS THIS THE STATUS QUO?

- Lack of a **CURRENT** comp-sci curriculum that marries theories and principles with **MODERN** development and operations practices
- Humans are vulnerable to **HYPE**
- Pervasive focus on **“Just Make it Work”**

WE ARE HERE TO HELP!

- This is a no **HYPE** zone
- Please be ready to think differently
- Be ready, you are not your tools, we are going to tear apart over hyped and hipster tech

CREATE A NEW AND DIFFERENT TECH COMMUNITY

- You will be exposed to (possibly) new ideas, technology, practices, and attitudes
- You will be equipped to put out the **TIRE FIRE!**



AREAS OF FOCUS

- DevOps
- HYPE
- Sane Architecture / Design



DEVOPS: WHAT IS IT?

- What is DevOps About?
 - **QUALITY PRODUCT**
- You write it. You run it. You are on call.
- Everything else is a distraction (tools, delivery, etc)

DEVOPS: VISUAL REFERENCE

RESPONSIBILITY



PRODUCT

THE ROLE OF OPERATIONS

- No such thing as a **DevOps Engineer**
- Provide and maintain an environment where work can be easily accomplished
- Performance Engineering and Capacity Planning
- Contributing code relating to operability, as well as adding platform features including product features
- Submitting pull requests for broken things, yes yours too

HYPE: TECH IS AKIN TO FASHION

The background image shows a large offshore oil rig engulfed in a massive fire at night. Thick black smoke billows from the top of the flames. Several fireboats are positioned around the burning rig, directing high-pressure water jets onto the base of the fire. The scene is dramatic and chaotic, illustrating the 'hype' and potential 'burning' of technology.

- IT'S THE **FUTURE!!!**
- Do you remember?
 - SOAP Web Services
 - Rich Internet Applications
 - CORBA
 - Java Applets
 - OSGI
 - OpenStack / Private Cloud
 - Silverlight
 - Windows

HYPE: THIS YEAR'S INSANITY



- IOT
- Docker
- UniKernels
- Cloud Native
- Micro Services

HYPE: NOT WELCOME

- Popularity does not equal **MERIT**
- The adoption of **HIPSTER TECH** will always result in a **TIRE FIRE**
- Why? Because the foundations of Hipster Tech are not rooted in research and the analysis of prior art

ARCHITECTURE & DESIGN: THE AGE OF SOFTWARE ASSEMBLY

- You can't expect to be able to toss a bunch of components together and have a solution emerge
- This is akin to showing up to a garbage dump and expecting to be able to assemble a **Rolls Royce**

ARCHITECTURE & DESIGN: THE RESULT OF SOFTWARE ASSEMBLY

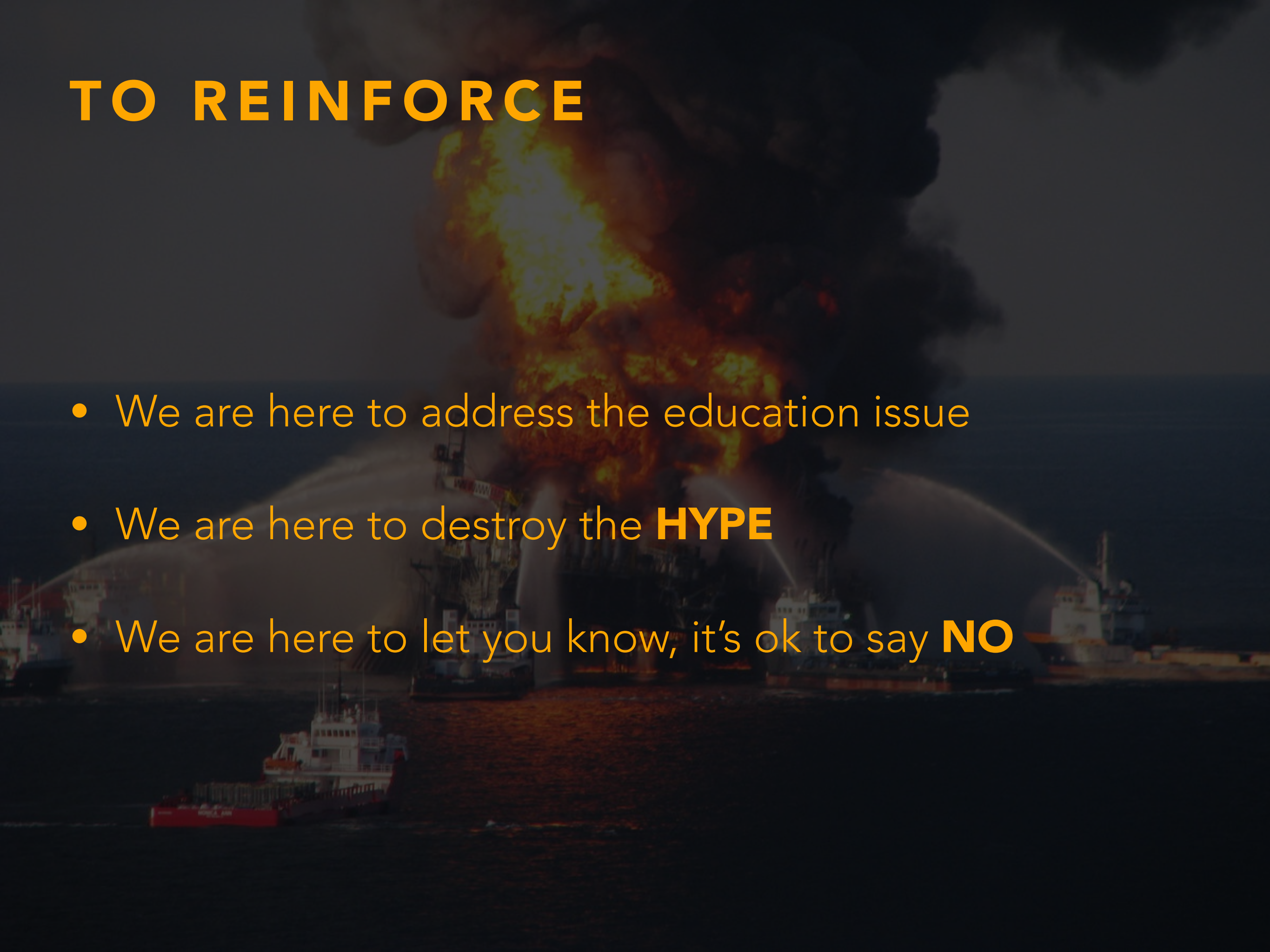
- If you do show up to a garbage dump to do assembly you are going to get what one would expect!
- More **GARBAGE!**
- You are also going to end up with a talent acquisition problem
- Who wants to work in a garbage dump?
 - People who are **OK** with **GARBAGE**

ARCHITECTURE & DESIGN: THE PRINCIPLES

- Great architecture is rooted in these **FUNDAMENTAL** principles:
 - Separation of Concerns
 - Single Responsibility Principle
 - Principle of Least Knowledge
 - Composition
- Violating these principles will result in a **TIRE FIRE**

TO REINFORCE

- We are here to address the education issue
- We are here to destroy the **HYPE**
- We are here to let you know, it's ok to say **NO**



Z, DO THE PULSE DEMO

- Why is Pulse important to this community?



HOW ONE WEIRD GRAPH THEORY TRICK WILL IMPROVE YOUR INFRASTRUCTURE PROVISIONING.

- James Nugent

