BUILDING A DIGITAL QUARRY FOR DINOSAUR NATIONAL MONUMENT

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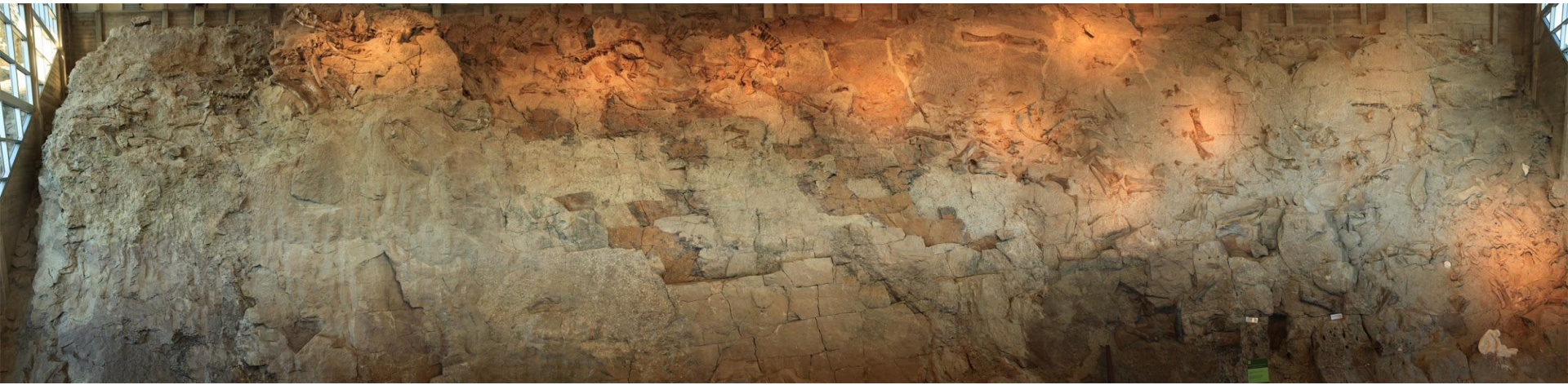
THIS IS CARNEGIE QUARRY

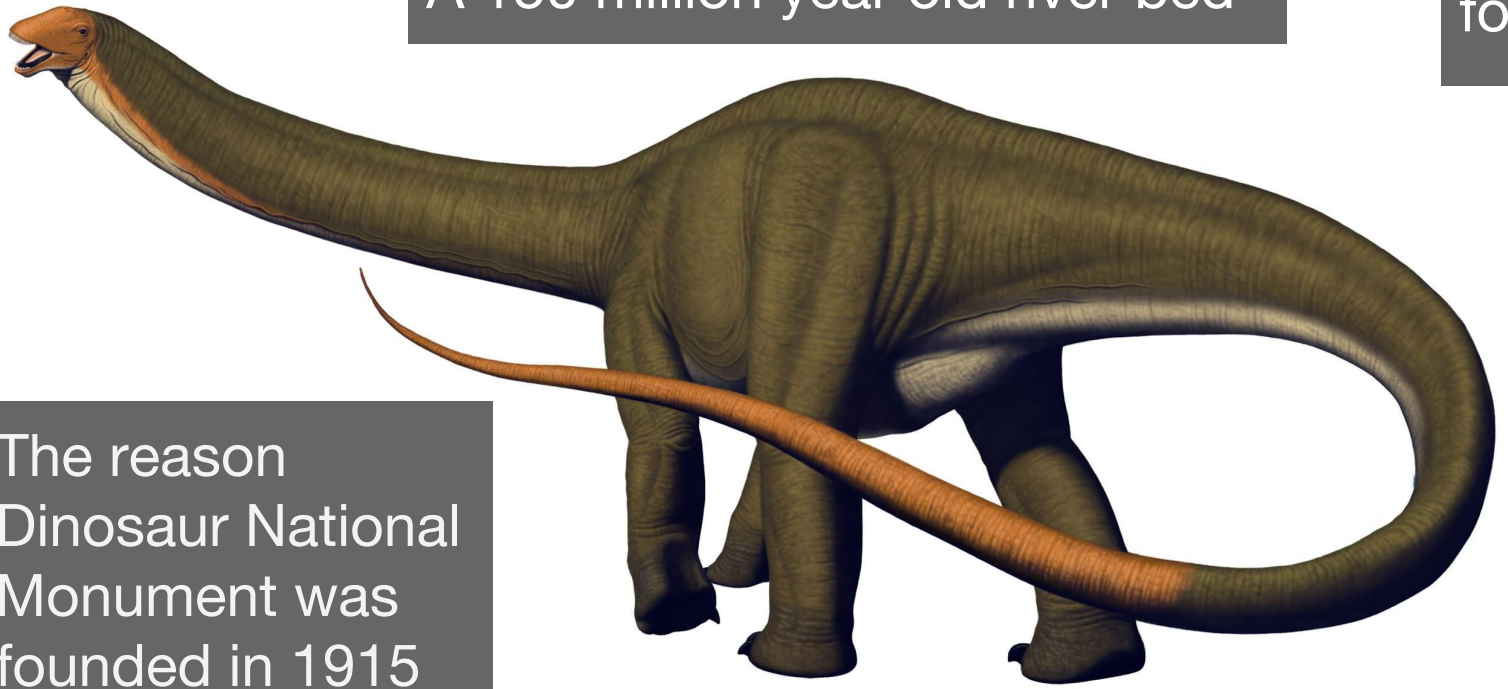


This is a sign as tall as your head

A slice of the Jurassic Morrison Formation

A 150 million year old river bed

Originally held 5000 fossils



1500 fossils remain in the quarry

The reason Dinosaur National Monument was founded in 1915


IT USED TO LOOK LIKE THIS

ONE PALEONTOLOGIST'S VISION

"How appropriate that they, or part of them, be exposed in relief as they were buried…how appropriate to build a fair sized building over them …"

Earl Douglass, 1915
First Paleontologist to excavate Carnegie Quarry
(Referring to the fossils of Carnegie Quarry)

ANOTHER PALEONTOLOGIST'S VISION

"To make the vast scientific, historic, and photographic record of the Carnegie Quarry readily available to the scientific community and the public across the globe."

Dan Chure, 2015
Current Dinosaur National Monument Paleontologist

TWO YEARS OF WORK

That other people did:

Nicole Ridgwell 2014

Ron Shugan 2013

Ben Otoo 2014

Also: Dan Chure, Lorraine Chure, Brooks Britt, Beth Shugan and Erin Cahill - not mention the dozens of men and women who excavated the quarry in the first place and created a century of invaluable documentation.

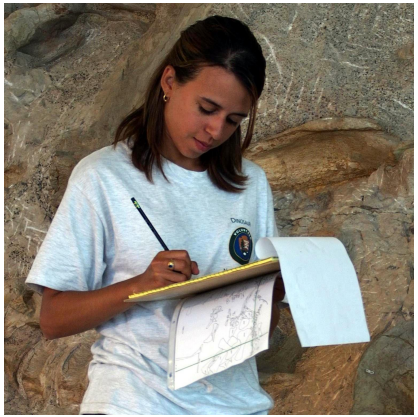
FOUR 2015 GEOCORPS PARTICIPANTS

Trinity Stirling

BS in Geology and Environmental at Science California State University of Chico, 2015 (apparently immune to gravity)

Thea Boodhoo

AA in Advertising at Academy of Art University, 2008 (only one who remembered Star Wars: Knights of the Old Republic)



Marie Jimenez

BS in Geology at University of Rhode Island, expected 2016 (did basically everything)

Elliott Smith

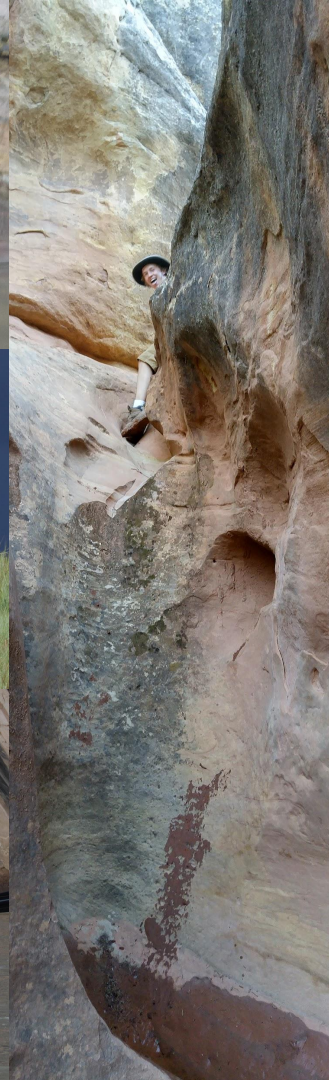
BS in Geology at University of Utah, expected 2017 (memorized the park's entire geologic column in three days)

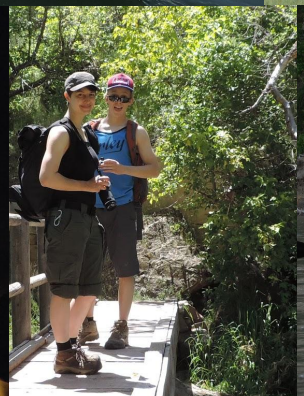
FIRST WE ARCHIVED


THEN WE ARCHIVED SOME MORE


THEN WE... ARCHIVED
MEN AND DINOSAURS

BUT DON’T FEEL BAD FOR US





THEN WE DISCOVERED A MAP

IT WAS A VERY SPECIAL MAP

Created by the 2014 GeoCorps Participants, this Adobe Illustrator document contained the magic ingredients needed to begin a live demo of the Digital Quarry:

- 2000ish illustrations of the fossils of Carnegie Quarry
- Each one a unique vector path
- Capable of export as an SVG file

WHAT'S AN SVG FILE?

- Translates vector images into XML
- Allows addition of CSS selectors
- Lets you make each path interactive
- Makes a rad slide background

WE USED IT TO MAKE A PROOF OF CONCEPT

You can still see this live here:

http://cretaceousmantua.com/tharkibo/test.html

WE USED THE PROOF OF CONCEPT TO MAKE A SMALL-SCALE DEMO


THEN WE WONDERED
WHAT TO DO WITH
ALL THE ARCHIVES
WE SCANNED
MEN AND DINOSAURS

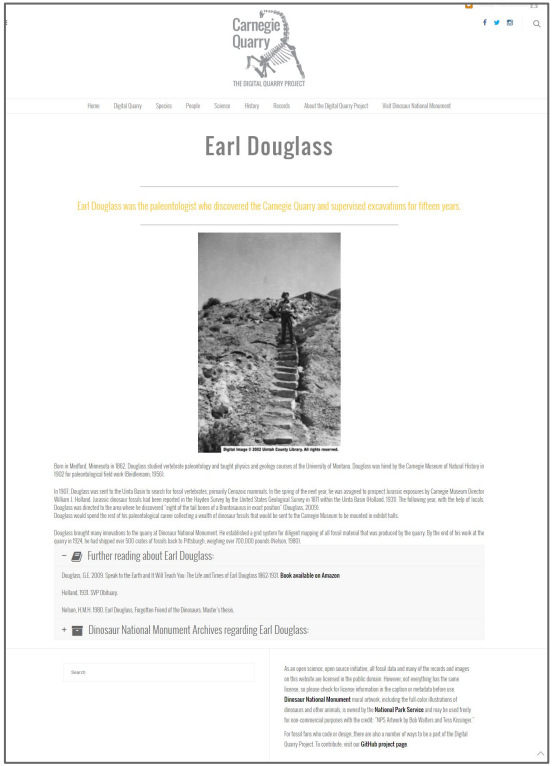
SO WE SET UP WORDPRESS

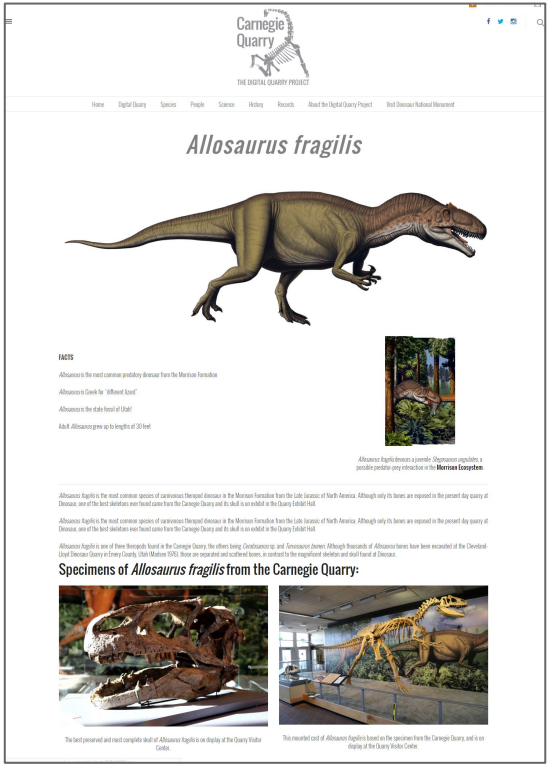
- The world’s most popular content management system
- Free
- Tons of pre-made themes to make websites look good out of the box

AND WE GOT SOME WEB HOSTING AND A DOMAIN NAME

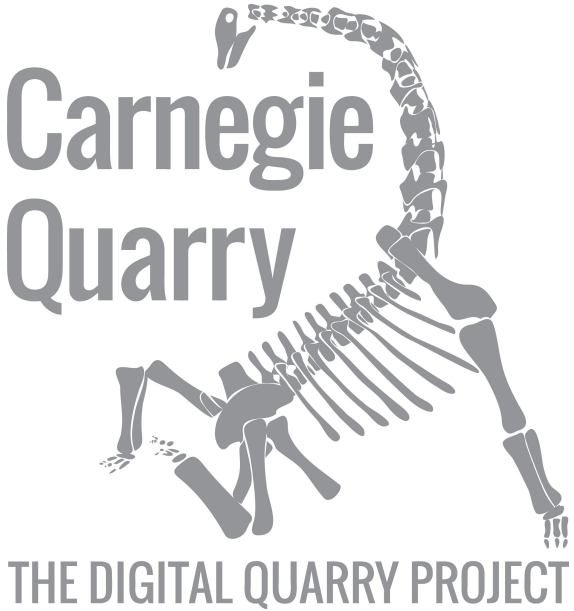
- We brainstormed a bunch of names and decided on CarnegieQuarry.com
- We used Bluehost
- They gave us lots and lots and lots of storage space for our thousands and thousands of archives and fossil photos

ELLIOTT WROTE A *LOT* OF ARTICLES





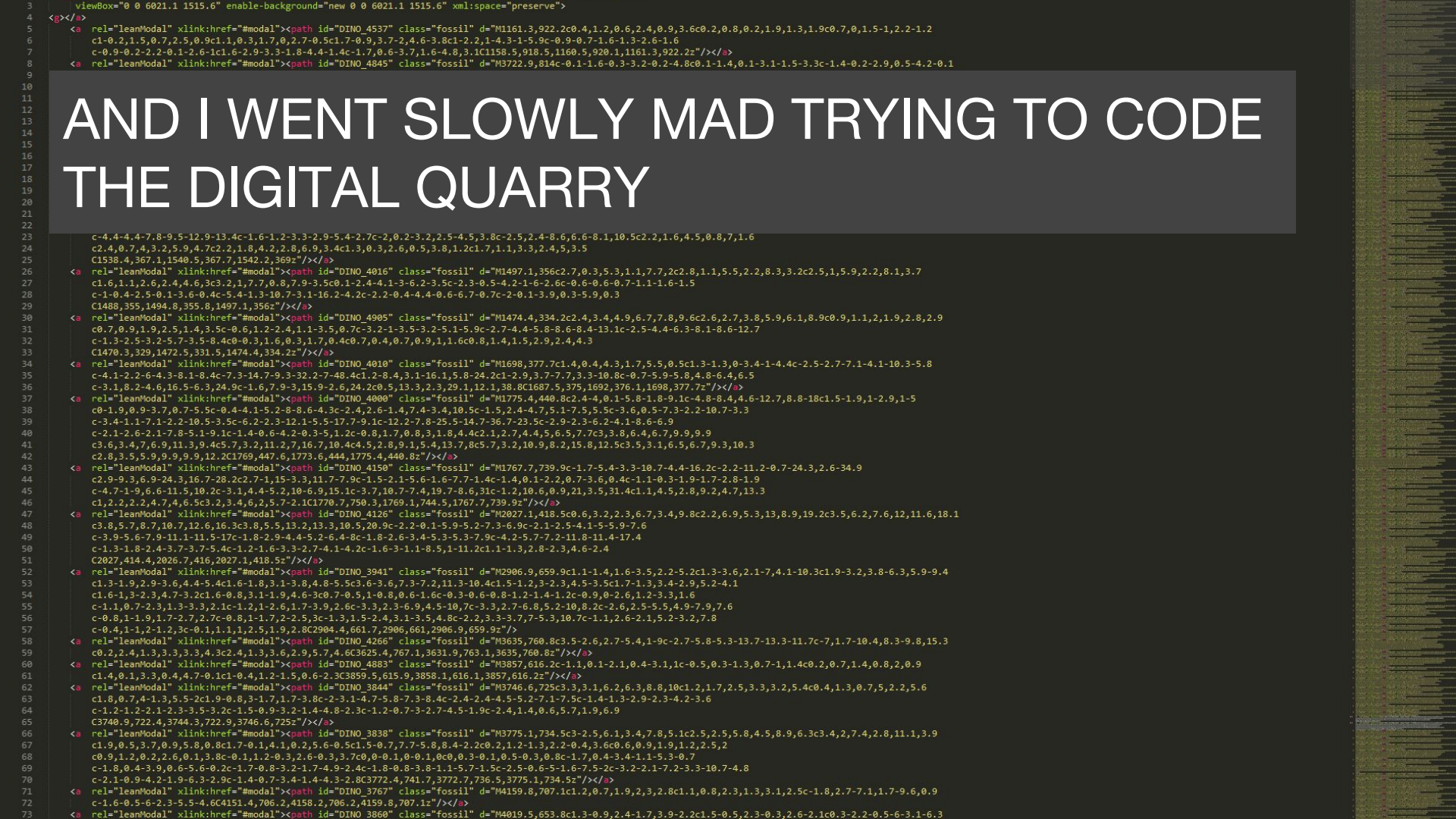
TRINITY DESIGNED A LOGO



AND A LOT OF LOGOS WE DIDN’T USE

MARIE MADE A DATABASE FOR THE ARCHIVES AND WROTE DESCRIPTIONS FOR THE ARCHIVES AND UPLOADED ARCHIVES AND NAMED THE ARCHIVE FILES AND SCANNED MORE ARCHIVES

AND I WENT SLOWLY MAD TRYING TO CODE THE DIGITAL QUARRY



THEN WE RAN OUT OF TIME

It was very sad.

But we knew that we had accomplished far more than any of us had expected for the short 12-week program.

We only wished we could launch the website for the public.

BUT AT THE LAST MINUTE, INHA SAVED THE DAY

They funded several more weeks of work to make the website ready for a public launch that coincided with the 100th anniversary of Dinosaur National Monument.

AND ON OCTOBER 7, 2015...

One hundred years after the National Park Service officially preserved the fossils of Carnegie Quarry for the world...

WE LAUNCHED CARNEGIEQUARRY.COM

To make sure the whole world finally has access to the fossils of Carnegie Quarry.

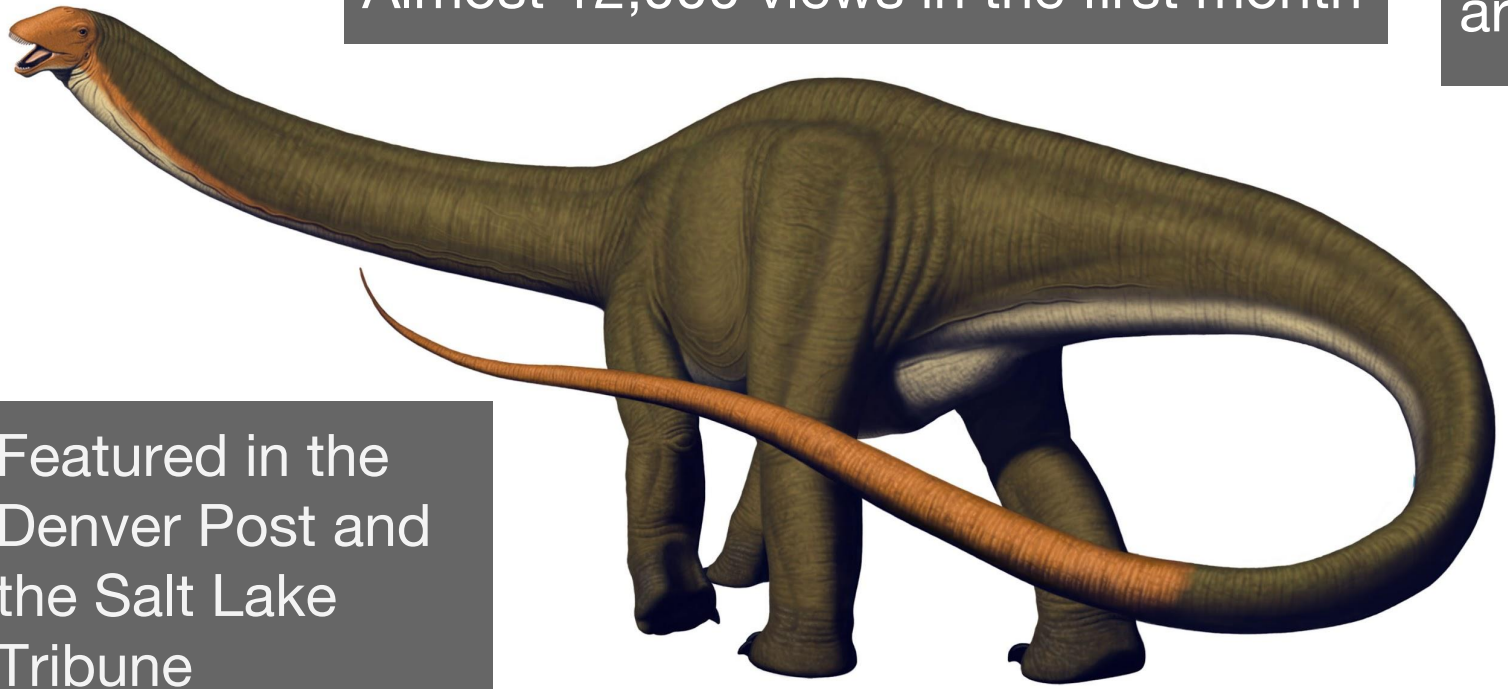
LET’S CHECK IT OUT

CarnegieQuarry.com

4388 views in the first three days

Almost 12,000 views in the first month

At least 8 news articles



Featured in the Denver Post and the Salt Lake Tribune

One new coder through GitHub

WHAT'S NEXT

- We've open-sourced the digital quarry and we invite all coding fossil fans to contribute to the GitHub repo
- We have lots of data entry planned with Brigham Young University
- We just 3D-scanned the whole quarry with LiDAR and it would make an amazing virtual reality experience
- Oh and the extra 5000 fossils from the old quarry need to be added (Hello GeoCorps 2016!)


THANKS!