

SIGBOVIK

Debunking the April 1 model of SIGBOVIK occurrences

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SIGBOVIK 2024
Carnegie Mellon University
April 5, 2024

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We can also use formula (1) to assist in the quest for the long-elusive SIGBOVIK 2006. We find that $d(2006) = -3043$, which means that SIGBOVIK 2006 occurred on September 1, 1998. This is significantly earlier than SIGBOVIK scholars and treasure-seekers had previously suspected, which explains why searches for the SIGBOVIK 2006 proceedings have so far been unsuccessful.

1 Introduction

"Hey ChatGPT, write us an inspiring introduction for our paper."

— The Authors

In the vast tapestry of time, there exists a celestial event, as awe-inspiring as the eclipse and as deeply mysterious as the farthest reaches of the cosmos. That event, dear reader, is none other than SIGBOVIK. Since the nascent dawn of humanity, it has held an enigmatic allure that has captivated the hearts and minds of scholars, prophets, and ordinary people alike. A cosmic ballet that dances to the rhythm of the arcane, SIGBOVIK unfurls itself in a tantalizing spectacle of grandiose enigmas, swirling within the nebulous vortex of profound absurdities, a manifestation of the ludicrous sublime, held within the cryptic crucible of intellectual whimsy.

3 A true formula

As everyone knows, the best way to get a formula that fits a set of data is polynomial interpolation. If we fit a polynomial to the "Year" and "Day of year" columns of Table 1, out pops formula (1). In this formula, y is the year and $d(y)$ is the date of SIGBOVIK as a day of the year. Nothing could be simpler.

$$d(y) = \frac{43}{4560095232000}y^{17} - \frac{30047}{92990177280}y^{16} + \frac{851694793}{163459296000}y^{15} - \frac{18311875130909}{348713164800}y^{14} + \frac{276830506252402673}{747242496000}y^{13} - \frac{14870078625754232560}{1574638003110764303282557}y^{12} + \frac{1916006400}{13200864699765411167529394824480967424553023}y^{11} + \frac{50295168000}{17738988471252914196132632951385148489463347873}y^{10} - \frac{87178291200}{236480074634009881238496478045183070350584148727}y^9 + \frac{2018016000}{28599804237417284010116787415739209430100326170631}y^8 - \frac{605404800}{20833473657103671067709358450132373439311661150441}y^7 + \frac{1750320}{-1411276445199731060574783099652407032650648422}y^6$$

(1)

Lowestcase and uppestcase letters: Advances in derp learning

Dr. Tom Murphy VII Ph.D.

1 April 2021

1 Introduction

Have you ever been writing something on the internet and wanted to convey that you ARE FEELING ANGRY? Conversely, have you ever fired back a super quick dm and u wanted to make it clear that it was like super ca3 and so u didnt use ne capitals or punctuation dots except 4 that one place where u dont no how to write ca3 as in short for casual without it lol

If so, you made use of the fact that all letters have UPPERCASE VERSIONS (e.g. signifying ANGER) and lowercase versions (e.g. signifying u dont care lol). These dimensions have other uses, for example, it is polite to start a person's name with a capital letter to show that you took the time to regard their humanity (as it takes extra work to press the caps lock key, press the first letter of their name, and then press the caps lock key again to turn it off). In German, Nouns start with uppercase Letters, signifying Superiority over other grammatical Categories like Verbs and Adjectives. Lowercase letters can be used to conserve printer ink. Actually, I'm not sure that lowercase letters have any other uses, but let's just roll with it.

There's nothing wrong with this (despite the classical advice to use shift to *reduce* conflict [2]). But the thing is: What if I'm even MORE ANGRY THAN I WAS BEFORE? There are some standard sorts of typographic emphasis, like I can be **BOLD ANGRY** or ***BIG BOLD ITALIC UNDERLINE ANGRY*** or ***COMBINE A LOT OF THESE ANGERS*** each with its own nuances, depending on the cascading style sheet or LaTeX class file. To be even more casual than lowercase, u can learn 2 write like this, and shrink away and also ~~cross out ur words in shame in advance of them even being read~~, but there are few other options for de-emphasis. Plus, when I'm FEELING PRETTY ANGRY, TOM, how do I capitalize that already-capitalized T in order to show the proper reverence for your humanity?

This paper is about unshackling this dimension of human expression by introducing letterforms further along the uppercase and lowercase dimensions. Basically, we want to know what the uppercase version of uppercase T is, and a lowercase version of lowercase t is.

1.1 Induction

Today we're just concerned with English letters, of which there are only 26. To create an upperercase and lowerercase alphabet by hand is O(52 pick up), which for a guy who likes drawing letters anyway and who alphabetized Star Wars for fun, is not much to ask. In fact I drew such alphabets in Figure 1 just now.

ABCDEFGHIJKLMNOPQRSTUVWXYZ
0bcde fghijklmno
pqrstu vwx yz
EVEN MORE
UPPERCASE
0nd 88paci0lly
low8rc0ds too

Figure 1: Probably someone already had this idea and did it before I was even born, thus taking the fun out of it for the rest of us, but here's a hand-made alphabet with "upperercase" and "lowerercase" letters. You can download this TrueType font from tom7.org/lowercase.

THE BALLMER PEAK: AN EMPIRICAL SEARCH

CLINICAL STUDY

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ABSTRACT

The concept of a 'Ballmer Peak' was first proposed in 2007, postulating that there exists a very specific blood alcohol content which confers superhuman programming ability. More generally, there is a commonly held belief among software engineers that coding is easier and more productive after a few drinks. Using the industry standard for assessment of coding ability, we conducted a search for such a peak and more generally investigated the effect of different amounts of alcohol on performance. We conclusively refute the existence of a specific peak with large magnitude, but with $p < 0.001$ find that there was a significant positive effect to a low amount of alcohol—slightly less than two drinks—on programming ability.

Keywords Alcohol · Problem solving · Cognition · Software engineering · Programming · Coding

ACM Reference format:

Twm Stone and Jaz Stoddart. 2024. The Ballmer Peak: An Empirical Search. In *Proceedings of SIGBOVIK, Pittsburgh, PA USA, April 2024 (SIGBOVIK '24)*, 7 pages.

1 Introduction

There has long been a belief among programmers that their coding ability is significantly improved after a couple of drinks. Although there has been significant previous work in this area—notably showing a minor beneficial impact of alcohol on creative problem solving (Benedek et al., 2017), and showing a detrimental impact of a particular (high) level of inebriation on novice coders (Brabrand et al., 2024)—there has not been any direct scientific investigation of the effect of differing levels of alcohol intoxication on coding ability.

It was posited in 2007 by renowned popular science author Randall Munroe, in the adjacent comic (Munroe, 2007), that there existed a peak of width approximately 0.01%, centred on 0.1337% blood alcohol content, which confers superhuman programming ability. More recently the intrepid comedic minds of Mitchell, Webb et al. explored the huge potential benefits to all human activities of having a very precise level of inebriation (slightly less than two drinks (Mitchell, Webb et al., 2010)) and an insightful Danish-language documentary by Vinterberg demonstrated the wide-ranging positive effects of maintaining a blood alcohol level of above 0.050% (Vinterberg, 2020).

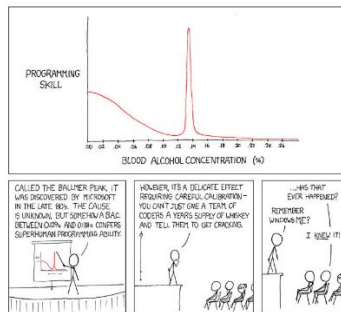


Figure 1: Apple uses automated schnapps IVs.

In this study, we attempt to establish the existence of the Ballmer Peak and more generally the existence, magnitude and location of any benefit to programming conferred by alcohol intoxication. We additionally aim to gain a qualitative understanding of the different ways in which alcohol consumption impacts the different facets of programming, and to guide future research in this area.

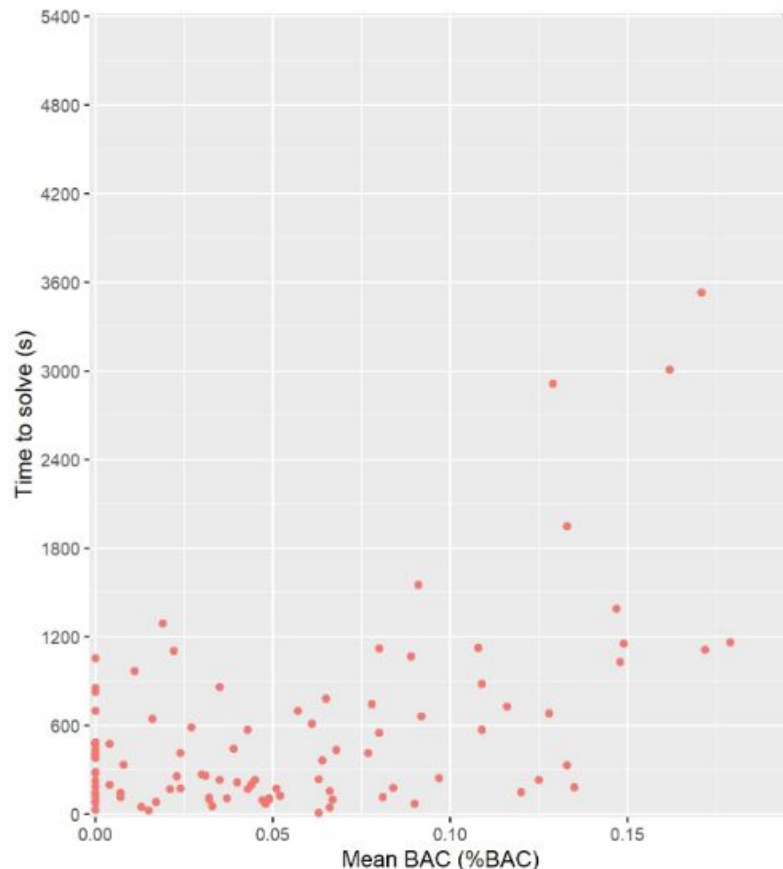
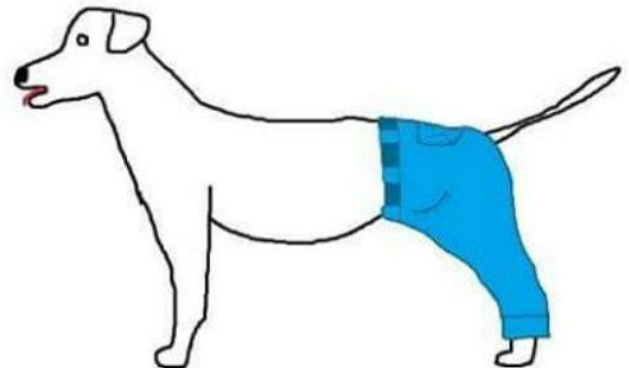
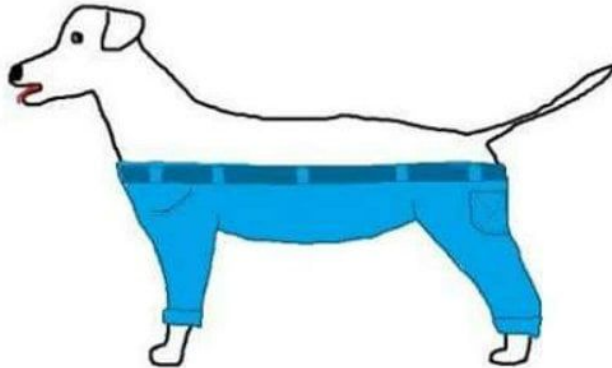


Figure 2: Time to solve in seconds against mean %BAC.

Problem: Answer this meme

If a dog wore pants would he wear them
like this or like this?



Possible solution: diffvg

Differentiable Vector Graphics Rasterization for Editing and Learning

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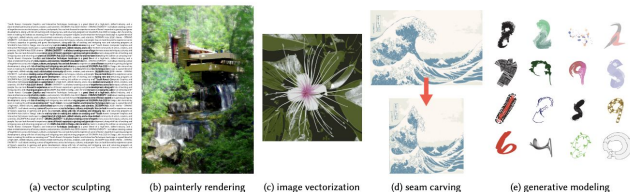


Fig. 1. We introduce a differentiable rasterizer for vector graphics that bridges the raster and vector domains through backpropagation. Differentiable rasterization enables many novel vector graphics applications. (a) Interactive editing that locally optimizes for image-space metrics, such as opacity, under geometric constraints. (b) A new painterly rendering technique by fitting random Bézier curves to a target image. (c) Improving state of art image vectorization result. (d) Editing vector graphics using potentially non-differentiable raster image processing operators, such as seam carving [Avidan and Shamir 2007] for image retargeting. (e) Training a variational autoencoder [Kingma and Welling 2014] to generate vector MNIST digits [LeCun et al. 1998] and adding stylized strokes as postprocessing. Images courtesy of wikipedia user Daderot and Eric Guinther, and freesvg.org user OpenClipart.

We introduce a differentiable rasterizer that bridges the vector graphics and raster image domains, enabling powerful raster-based loss functions, optimization procedures, and machine learning techniques to edit and generate vector content. We observe that vector graphics rasterization is differentiable after pixel prefiltering. Our differentiable rasterizer offers two prefiltering options: an analytical prefiltering technique and a multisampling anti-aliasing technique. The analytical variant is faster but can suffer from artifacts such as conflation. The multisampling variant is still efficient, and can render high-quality images while computing unbiased gradients for each pixel with respect to curve parameters.

We demonstrate that our rasterizer enables new applications, including a vector graphics editor guided by image metrics, a painterly rendering algorithm that fits vector primitives to an image by minimizing a deep perceptual loss function, new vector graphics editing algorithms that exploit well-known image processing methods such as seam carving, and deep generative models that generate vector content from raster-only supervision under a VAE or GAN training objective.

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CCS Concepts: • Computing methodologies → Rendering; Shape modeling; Image manipulation.

Additional Key Words and Phrases: vector graphics, differentiable rendering, image vectorization

ACM Reference Format:

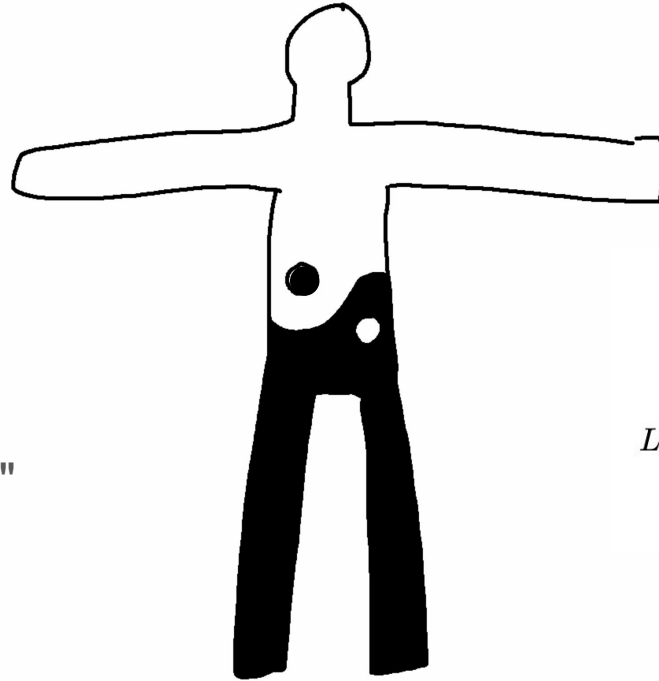
Tzu-Mao Li, Michal Lukáč, Michaël Gharbi, and Jonathan Ragan-Kelley. 2020. Differentiable Vector Graphics Rasterization for Editing and Learning. *ACM Trans. Graph.* 39, 6, Article 193 (December 2020), 15 pages. <https://doi.org/10.1145/3414685.3417871>

1 INTRODUCTION

Vector graphics compactly define images using mathematical primitives such as 2D points and curves in a resolution-independent fashion. They are ubiquitous in print, animation, web design, and user interfaces. However, current methods to edit or create vector graphics are arguably trailing behind those designed for raster images. For instance, automatic generation of vector graphics typically requires specialized algorithms that trace image edges and fit curves [Hertzmann 1998; Selinger 2003], and vector editing often calls for specialized solvers tailored to specific geometric primitives [Sun et al. 2007; Yang et al. 2015; Zhao et al. 2018].

In contrast, image processing and machine learning have created powerful and general tools such as convolutional neural networks

Cost function rules



"duality of man"

$$L_{\text{center}} = \left\| \frac{x_{\text{toleft}} + x_{\text{topright}}}{2} - \begin{bmatrix} 0.5 \\ 0.5 \end{bmatrix} \right\|^2 \quad (2)$$

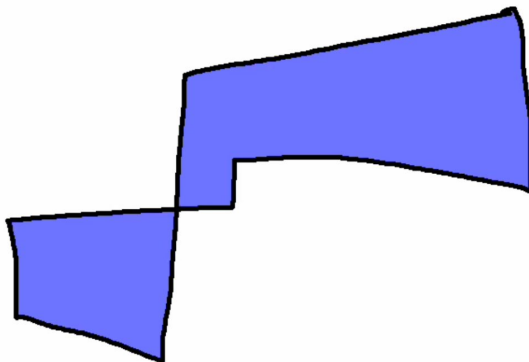
$$L_{\text{coverage}} = \left(\frac{1}{2} - \frac{\sum_{i,j} \max((S - J(X))_{ij}, 0)}{\sum_{i,j} S_{ij}} \right)^2 \quad (3)$$

Cost function rules

"no-stretch jeans"



OK!



WTF?

$$L_{\text{rigid}} = \|X - T\mathbf{X}\|^2, \quad (4)$$

$$T = \begin{bmatrix} \hat{p}_1 & \hat{p}_2 & \hat{p}_3 \\ \hat{p}_4 & \hat{p}_5 & \hat{p}_6 \\ 0 & 0 & 1 \end{bmatrix}, \quad (5)$$

$$\hat{p} = \operatorname{argmin}_p \left\| \begin{bmatrix} \mathbf{X}_{0,1} \\ \mathbf{X}_{1,1} \\ \vdots \\ \mathbf{X}_{0,n} \\ \mathbf{X}_{1,n} \end{bmatrix} - \begin{bmatrix} X_{0:1,1} & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & X_{0:1,1} & 1 \\ & & \vdots & & \\ X_{0:1,n} & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & X_{0:1,n} & 1 \end{bmatrix} p \right\|^2 \quad (6)$$

Cost function rules

"torn jean avoidance"



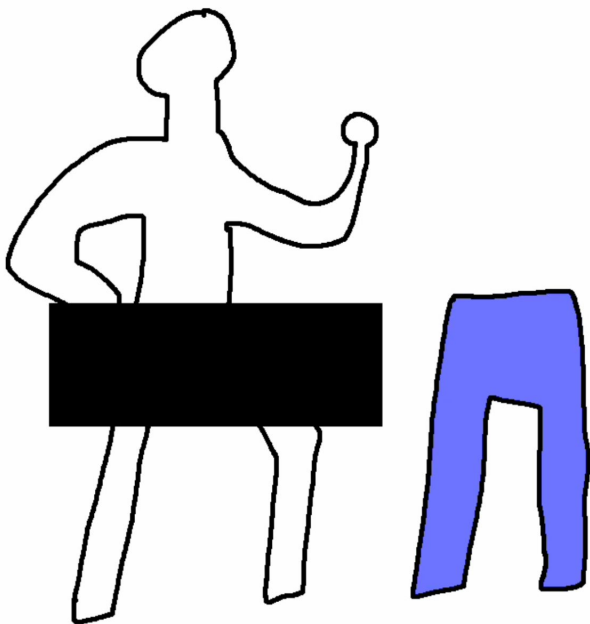
$$L_{\text{open}} = \frac{-\sum_{i,j} R(E_o(X))_{ij} S_{ij}}{\sum_{i,j} R(E_o(X))_{ij}} \quad (7)$$

$$L_{\text{closed}} = \frac{\sum_{i,j} R(E_c(X))_{ij} S_{ij}}{\sum_{i,j} R(E_c(X))_{ij}} \quad (8)$$

$$L_{\text{inter}} = \sum_{\{e_1, e_2\}: \binom{E(X)}{2}} \frac{\sum_{i,j} R(e_1)_{ij} R(e_2)_{ij}}{\sum_{i,j} \min(R(e_1)_{ij} + R(e_2)_{ij}, 1)} \quad (9)$$

Cost function rules

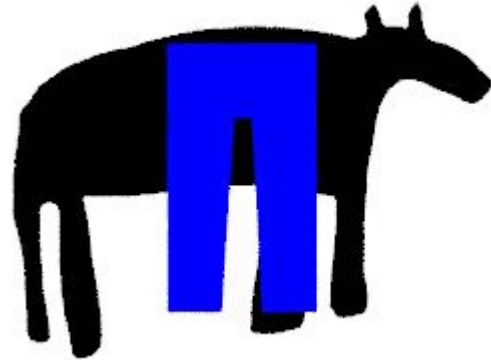
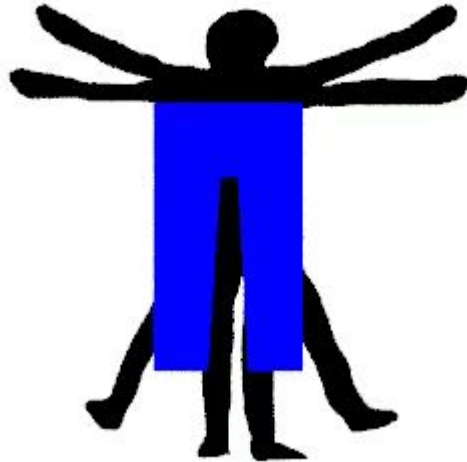
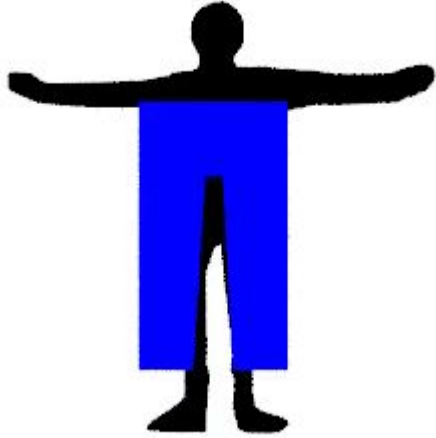
"dress code compliance"



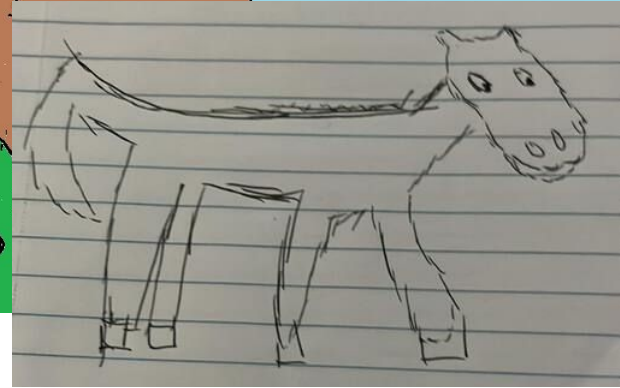
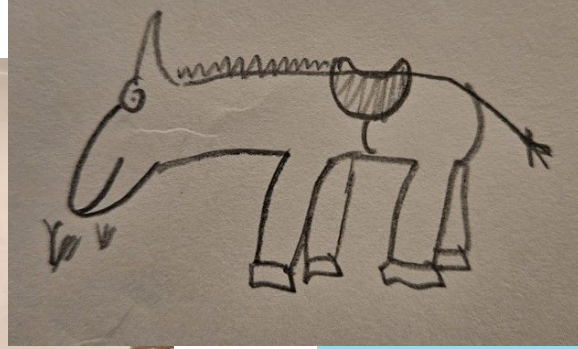
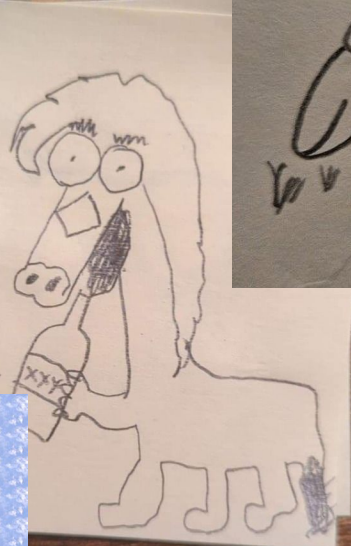
$$L_{\text{inside}} = \frac{\sum_{i,j} \max(J(X)_{ij} - S_{ij}, 0)}{\sum_{i,j} J(X)_{ij}} \quad (10)$$

PLEASE
NO

Results



Aside: You probably can't draw a horse without a reference



Another problem



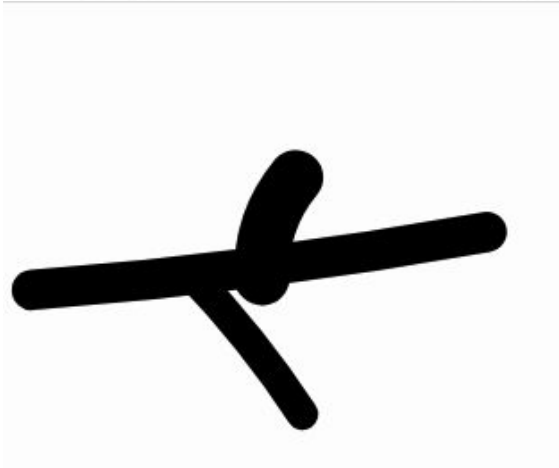
*we all
want one!*

Cost analysis

	Parliament	Cloud Gate
Annual visitors	3 million	5 million
Construction cost	(Restoration alone) \$4.5 billion	\$23 million

$$\frac{5,000,000}{3,000,000} > 1 \quad \frac{\$23,000,000}{\$4,500,000,000} < 1$$

Possible solution: SDF smooth union on beziers

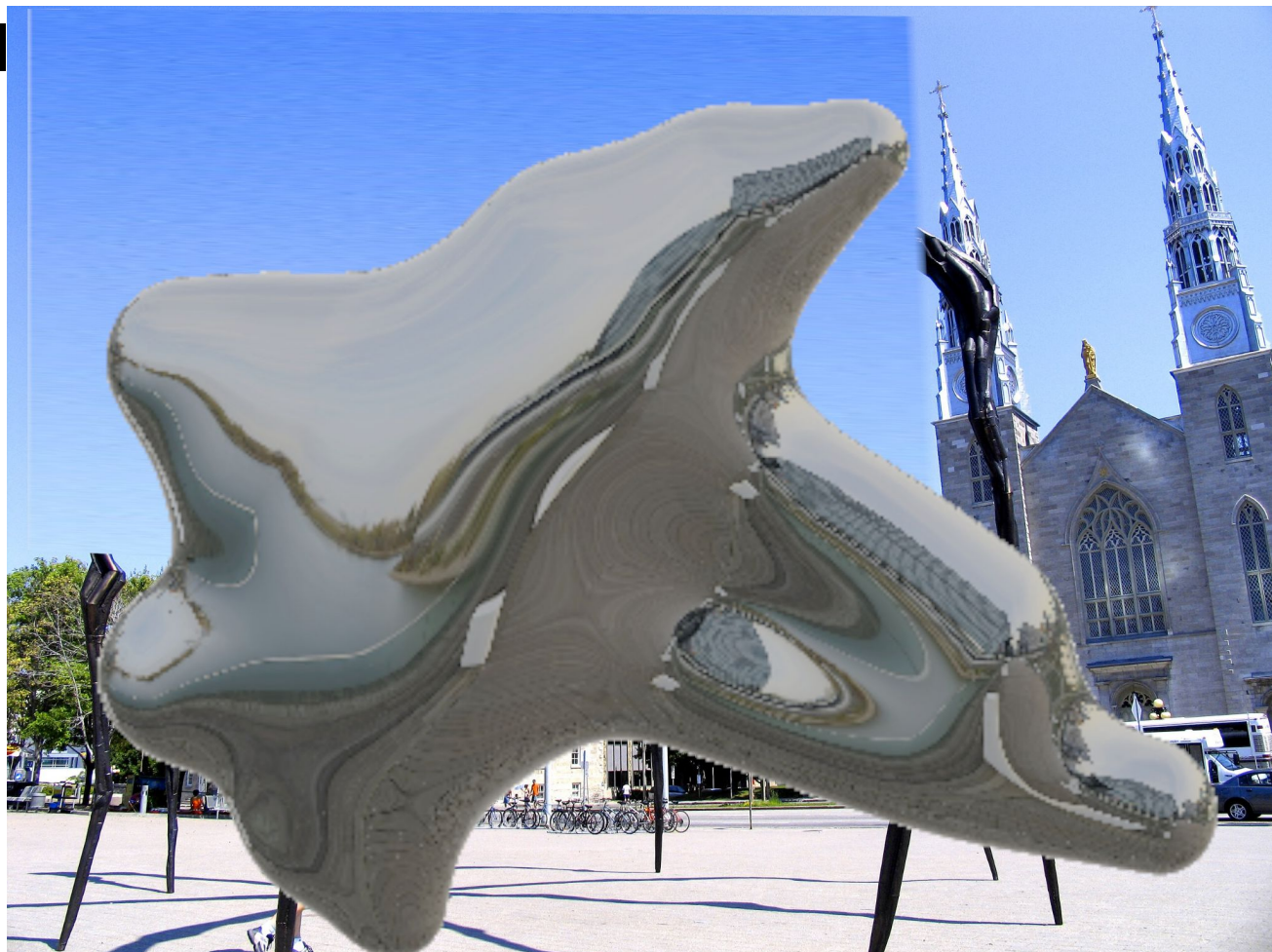


$$U(d_1, d_2; k) = d_1 + kg(d_2 - d_1)/k$$

Bean results



Bean resul



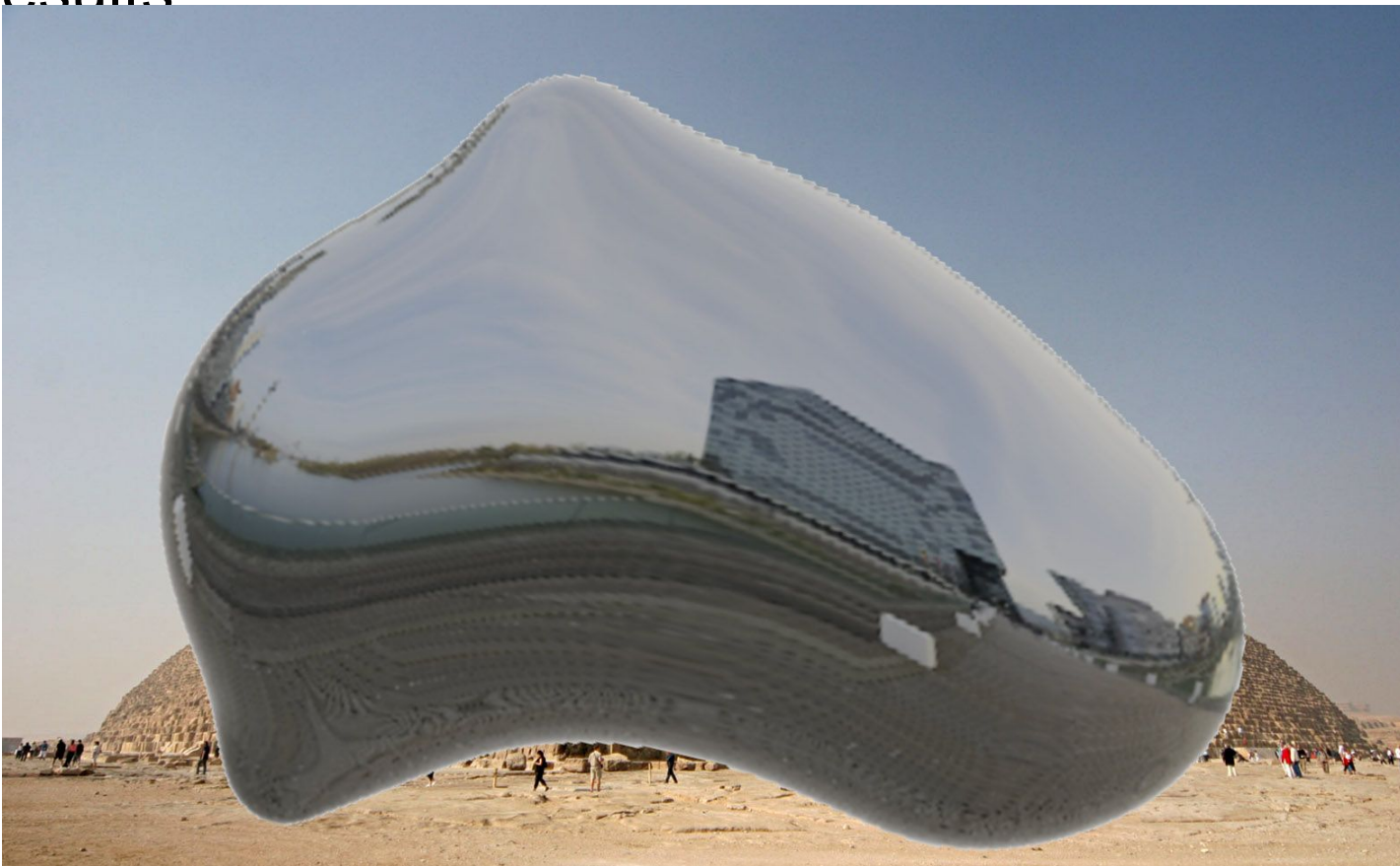
Bean results



Bean results



Bean results



New problem: I miss old panorama apps



The purpose of a panorama app should be **to inspire biblical awe**



Pandemonium

A panorama app making the weird
shit *all the time*



Pandemonium: A Panorama App to Maximize Jank

Dave Pagurek

March 2025

Abstract

The panorama feature on early smartphones produced frequent delightful visual glitches. Moderating their subjects, and subsequently forget their true goal: surprising the user with the unexpected and maximum occurrences of weird visuals rather than trying to sweep them under the rug.



Figure 1: A panorama of a cat featuring more limbs than typically expected. [2]

1 Introduction

Who doesn't want to see their cat have eight legs? [2] Panoramas used to provide a steady source of delight as subjects inevitably move while the panorama is being captured, such as the cat in Figure 1. We refer to these glitches as jank. While jank still occurs in the capture phase of modern panorama apps, the final image disappointingly removes most jank.

App makers have lost sight of their true goal: producing images that inspire a sense of biblical awe. Like how paintings got weird and embraced the surreal and abstract once photographs became common, panoramas too need to get weird now that it's easy

to capture reality.

We aim to fill this niche. First, we explore what used to produce panorama jank. We then design a new camera system optimized for jank. Finally, we evaluate this system by exploring its effectiveness at producing surprising results in the hands of users.

2 Background

Slit scanning is a photography technique where a full, two-dimensional image is created by scanning a series

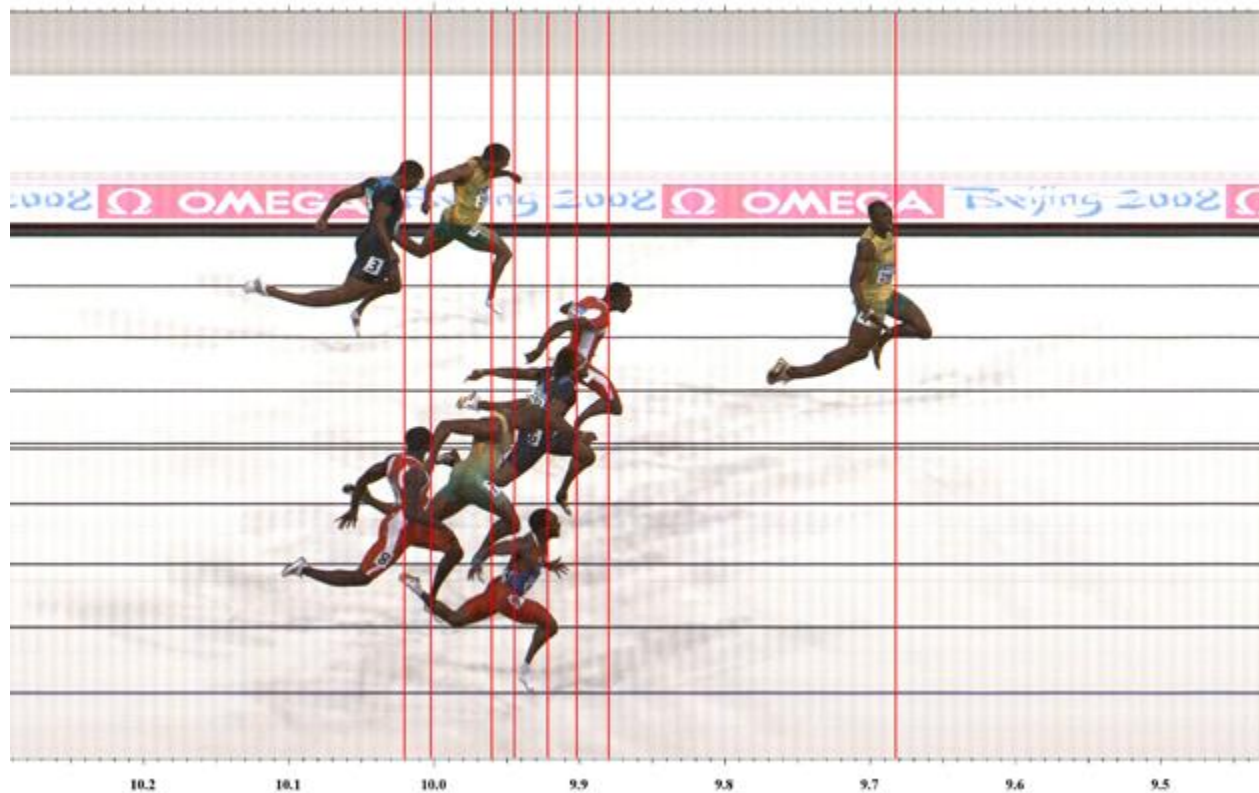
What used to cause jank?

A taxonomy of jank

Duplication jank



Bend jank



Smear jank



How Pandemonium works

Control flow



Bean There, Done That: Computer-Assisted Design of Bean Sculptures

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(Dated: March 23, 2024)

Chicago's status as a world-class city is cemented by its iconic bean sculpture. Other cities, wanting to replicate the success, have muddled the bean waters by introducing their own bean variations: New York City has a bean sharing similar properties, and Ottawa has a sphere, dubbed the "Ottawa bean" by locals. Our economic analysis proves their worth, so naturally other cities will want their own. We present a mathematical model of the space of all bean sculptures, and an algorithm to help cities replace existing landmarks with beans.



FIG. 1: Michaelangelo's *David* improved by being turned into a bean sculpture (photo by Wikimedia Commons Korido, CC BY-SA 4.0)

I. INTRODUCTION

Public art is important: It can serve as an expression of culture, heritage, and creativity within a community. It has the power to stimulate dialogue and provoke thought. It is a nice thing to go look at with one's friends¹, or to walk past on one's way to work. On top of this, successful public art installations can contribute to the economic vitality of a city by attracting tourists, fostering a sense of place, and enhancing the overall appeal of urban environments. Indeed, successful public art can become an icon for its host city, putting it on the map in a way that is not otherwise possible.

Consider as an example "The Bean" (known to nerds and um aekchupally types as "Cloud Gate"), a sculpture by artist Anish Kapoor that was unveiled in Chicago in 2006 [1]. Almost 20 years after its construction, the Bean stands as a symbol of Chicago and a success story of

public art. Having observed the Bean's impact (perhaps even feeling threatened by it) New York City, a city with no dearth of art and culture, commissioned another bean structure from Kapoor, which was completed in 2023. Naturally one begins to suspect that we are seeing the beginnings of a revolution within the art world and public life more broadly.

As the saying goes, twice is a coincidence, but three times is a pattern: Recently, a bean-like structure has been rediscovered by locals in Ottawa, Ontario. The piece was built in 1966 and originally called "The Sphere" [10], but it has recently enjoyed a surge in popularity since its rebranding as "The Ottawa Bean". Though less curvy than Chicago's, Ottawa bean is still a bean. In fact, it is the simplest bean (that is, the trivial bean), the result of taking away all possible bends and dimples.

The growing success of this third reflective bean cements the potential of bean structures to revolutionize public art. It is important to note that the Ottawa Bean

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¹This is true even if one's friends misrepresent the nature of the public art to which one is being led.

Control flow




$$\left(r - \frac{|d_1 - d_2|}{4r} \right)^2$$

$$\left| \frac{d_i}{r} \right|$$


$$p_o + m \frac{p_i - p_o}{\|p_i - p_o\|}$$

Results





Dave Pagurek van Mossel
Toronto, Ontario, Canada · [Contact Info](#)
374 followers · 354 connections

 [See your mutual connections](#)

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About

Artist and computer graphics programmer. Helps maintain a
[see more](#)

Activity



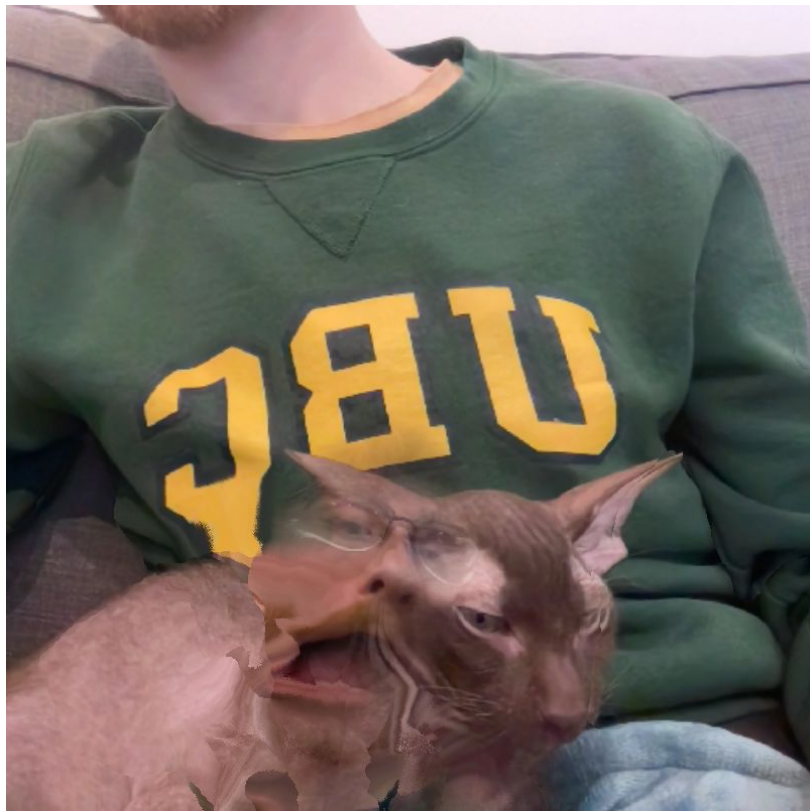

















Try it yourself!

<https://davepagurek.github.io/pandemonium/>

Where can I find more like this?

OFFLINE

sigbovik is offline.

 website

 Turn on Notifications

Follow and get notified when
sigbovik is live

Turn on Notifications

OFFLINE



sigbovik

556 followers

 Follow



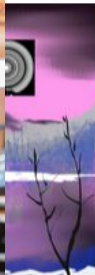
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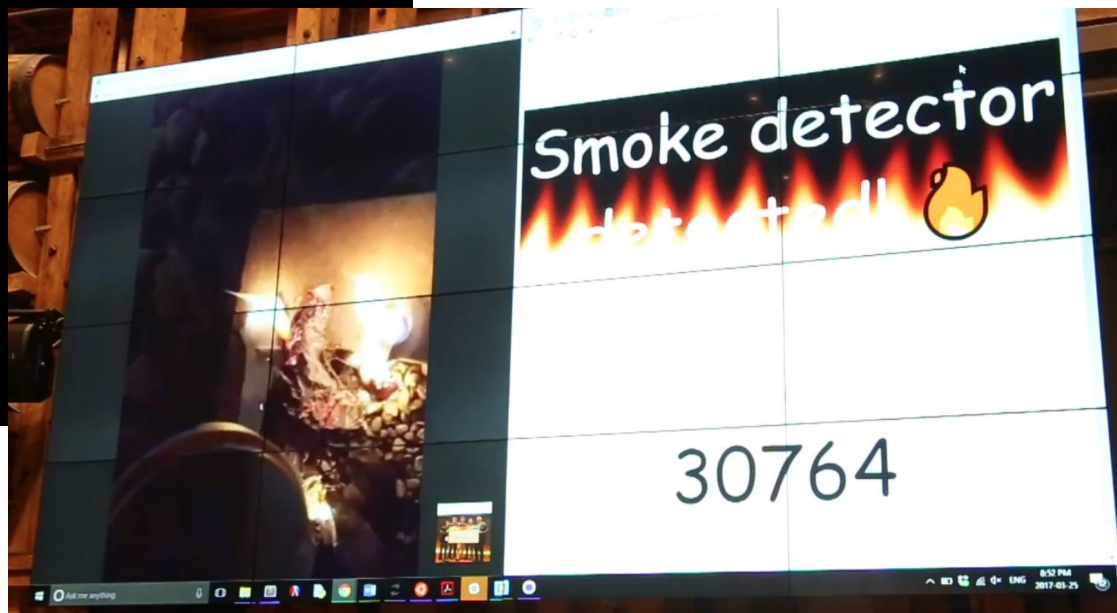
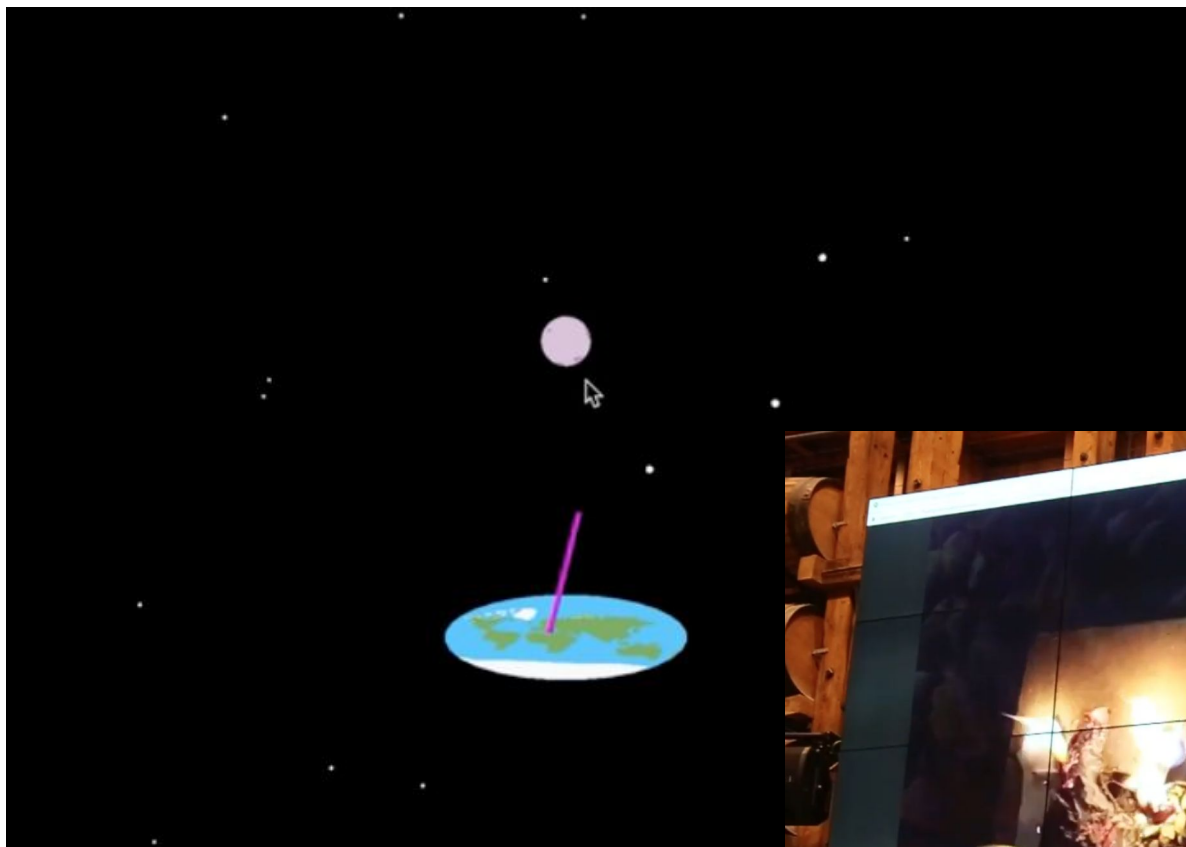
About

Schedule

Videos

 Chat





<https://davepagurek.github.io/horse-drawings/>

SEND ME HORSE DRAWINGS