

# Using ML to Improve UX and Literacy for Young Poets

# Contents



- Power Poetry Story
- Growing Pains
- Experiments
- Poetry Genome
- What's Next

# HUMBLE.



Design Whaler | Head of NY

Joined circa 100k poets

# Contents



- **Power Poetry Story**
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# Started from the Bottom (since 2012)

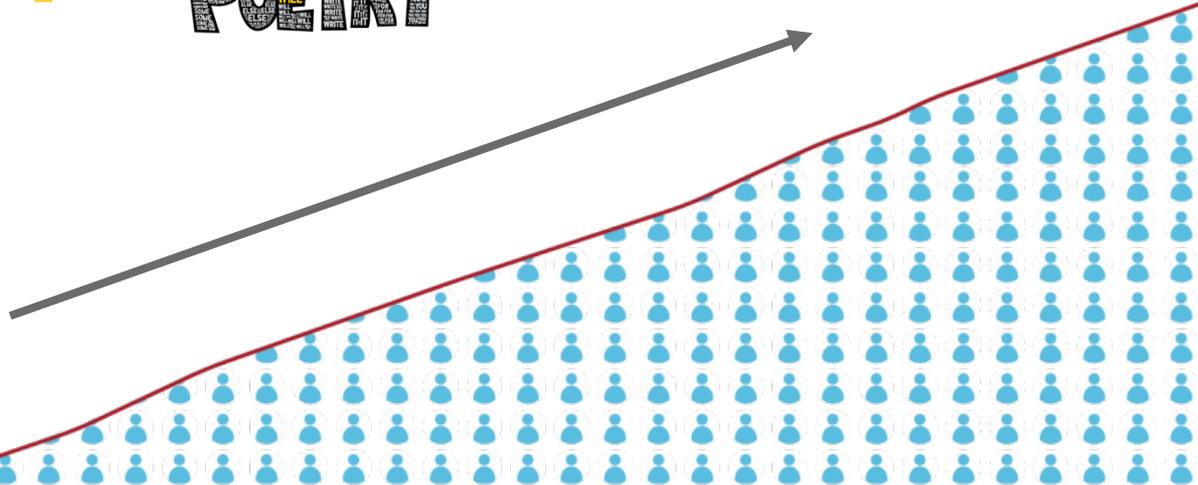


430k Poets

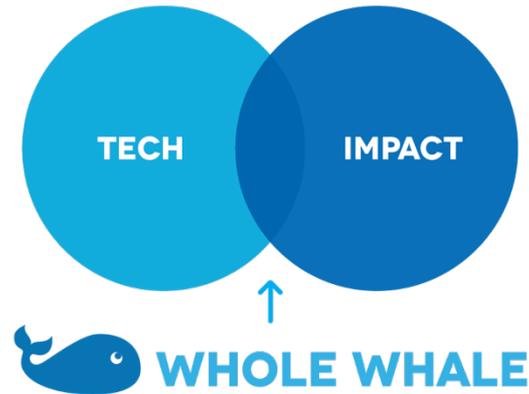
0 Poets

2012

2018



# Who is Whole Whale?

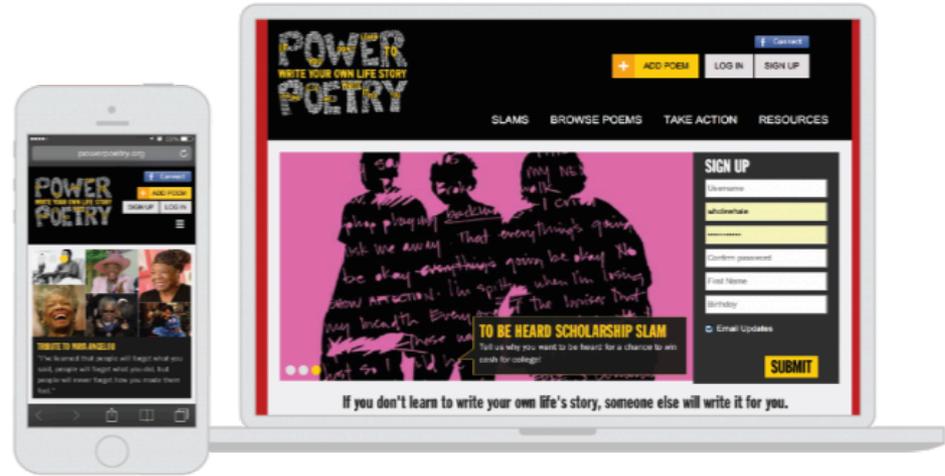


Whole Whale is a digital agency that leverages web data and technology to increase the impact of nonprofits.

# Who is Power Poetry?



- ✓ Learning resources
- ✓ Social Impact guides
- ✓ Online writing mentors
- ✓ Supportive community of 430,000+ poets



# One Classroom in the Bronx



# The Documentary

If you don't learn to write your own life story,  
someone else will write it for you.

## to be heard

HOME

ABOUT

TRAILER

CHARACTERS

PRESS

FILMMAKERS

"One of the **BEST DOCUMENTARIES** of the year." *The New York Times*  
NYT Critics' Pick

**WINNER** AUDIENCE AWARD SEATTLE INTERNATIONAL FILM FESTIVAL  
**WINNER** SPECIAL JURY PRIZE SEATTLE INTERNATIONAL FILM FESTIVAL  
**WINNER** AUDIENCE AWARD SARASOTA FILM FESTIVAL  
**WINNER** BEST FILM ELLENSBURG FILM FESTIVAL  
**WINNER** BEST DOCUMENTARY TEANECK INTERNATIONAL FILM FESTIVAL  
**OFFICIAL SELECTION** NEW YORK INTERNATIONAL FILM FESTIVAL  
**OFFICIAL SELECTION** FILM COLUMBIA FILM FESTIVAL  
**OFFICIAL SELECTION** SILVERDOCS DOCUMENTARY FESTIVAL  
**OFFICIAL SELECTION** TRUE/FALSE FILM FEST  
**OFFICIAL SELECTION** FULL FRAME FILM FESTIVAL  
**OFFICIAL SELECTION** CAMDEN INTERNATIONAL FILM FESTIVAL  
**OFFICIAL SELECTION** WORDSTOCK FILM FESTIVAL  
**OFFICIAL SELECTION** PORTLAND INTERNATIONAL FILM FESTIVAL  
**OFFICIAL SELECTION** IDFA NY DOCUMENTARY MARKET  
**OFFICIAL SELECTION** HAMPTONS INTERNATIONAL FILM FESTIVAL  
**OFFICIAL SELECTION** HOT SPRINGS FILM FESTIVAL  
**OFFICIAL SELECTION** VERMONT INTERNATIONAL FILM FESTIVAL  
**OFFICIAL SELECTION** ST. LOUIS INTERNATIONAL FILM FESTIVAL  
**OFFICIAL SELECTION** INDIE MEMPHIS FILM FESTIVAL  
**WINNER** AUDIENCE AWARD DOC NYC FILM FESTIVAL  
**WINNER** GRAND JURY PRIZE DOC NYC FILM FESTIVAL  
**WINNER** AUDIENCE AWARD NANTUCKET FILM FESTIVAL  
**WINNER** BEST DOCUMENTARY SAN DIEGO INTERNATIONAL FILM FESTIVAL  
**WINNER** BEST DOCUMENTARY VICTORIA FILM FESTIVAL  
**OFFICIAL SELECTION** WHITE RIVER JAZZ FILMS  
**OFFICIAL SELECTION** PHILADELPHIA FILM FESTIVAL

# Why Poetry?



# Nice, but So What?

# 85%

of kids facing juvenile  
detention can't read  
the verdict.



Source: *Begin To Read & RIF.org 2013*

# Impact Numbers



- Total Poets: 431,000
- Total Poems: 400,000
- \$1k Scholarship Slams all time: 20
- Peak MAU: 223,000
- School Groups: 124
- Poetry Teachers Trained: 1,600

**Educational hours added in  
2017:**

**90,785 Hours**  
**(\*54,471 US)**

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# Tech = Leverage



Countries: 175

Sessions/month: 200,000

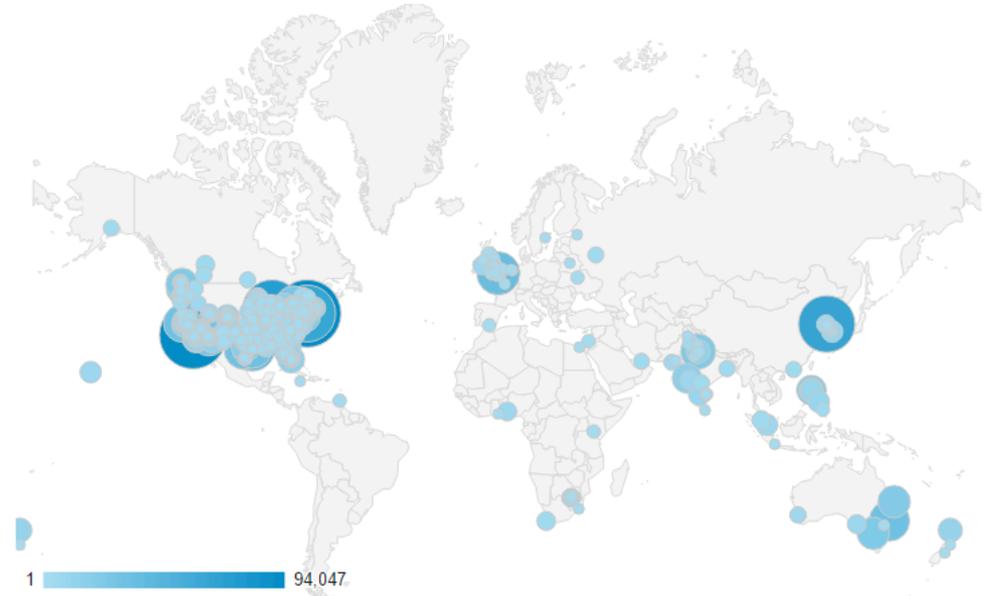
Avg. Duration: 3:52

Poets: 430,000

Poems: 298,000

Annual Budget: \$120k

Staff: 2.5



# Staff of 2.5 vs User Support

## Jessica



POETS: 431442 | GOAL: 500000



# Spammers Gonna Spam

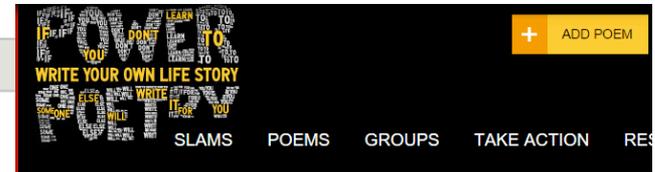
We didn't build it, but  
thrilled to use it!

Thanks Drupal & Bayes  
Theorem geeks

## stopforumspam

### SPAM CONTROL

ENABLED	NAME
<input checked="" type="checkbox"/>	<b>BOTCHA</b>
<input checked="" type="checkbox"/>	<b>CAPTCHA</b>
<input checked="" type="checkbox"/>	<b>Hidden CAPTCHA</b>
<input checked="" type="checkbox"/>	<b>Image CAPTCHA</b>
<input checked="" type="checkbox"/>	<b>Spambot</b>



stopforumspam dashboard header featuring a word cloud with terms like 'POWER', 'TO', 'WRITE YOUR OWN LIFE STORY', 'SLAMS', 'POEMS', 'GROUPS', 'TAKE ACTION', and 'RES'. A yellow button labeled '+ ADD POEM' is in the top right corner.

- An IP address [175.252.193.215](#) used by this account matches 1 times.
- An IP address [104.156.228.163](#) used by this account matches 9 times.
- An IP address [104.156.228.178](#) used by this account matches 11 times.
- An IP address [104.156.228.87](#) used by this account matches 11 times.

**DKAP1**

View | Bookmarks | Edit | Newsletter Subscriptions | OAuth Authorizations

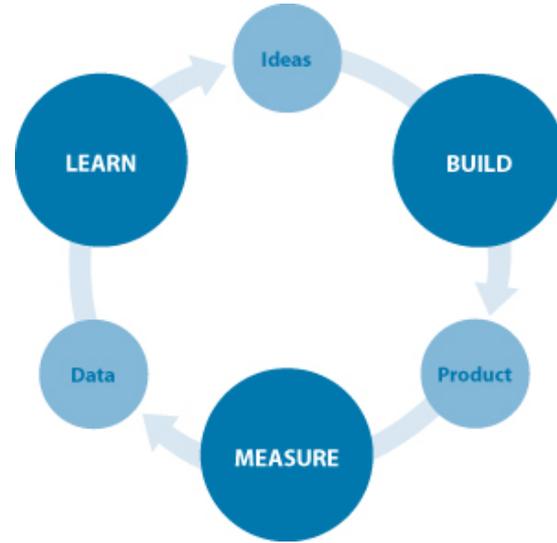
▶ CAPTCHA: no challenge enabled

**CHECK IF THIS ACCOUNT MATCHES A KNOWN SPAMMER**

- ▶ [Take action against this account](#)  
This account has 23 nodes and 2 comments.
- Unpublish nodes and comments by this account
- Delete nodes and comments by this account
- ▶ [Report this account to www.stopforumspam.com](#)  
An API key from [www.stopforumspam.com](#) is required to report spammers.

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# Make It Fun



## TOP POETRY SUPPORTERS

[Super Poets](#) | [Verified Poets](#) | [Active Poets](#) | [Top Poetry Supporters](#) | [Recent Poetry Supporters](#)

Top supporters are based on comments made on other poet's poems. There are 19332 active supporters on PowerPoetry.org.

<a href="#">MVP-Most Valuable</a>  2957 Comments	<a href="#">savigirl14</a>  1102 Comments	<a href="#">jviener</a>  518 Comments	<a href="#">powerful_imani</a>  354 Comments	<a href="#">Mafi Grey</a>  347 Comments
<a href="#">RebeccaYSPerez</a>  340 Comments	<a href="#">Angelwith1wing</a>  298 Comments	<a href="#">bdctc</a>  211 Comments	<a href="#">digitinc</a>  202 Comments	<a href="#">thisispoetryproject</a>  192 Comments
<a href="#">lizardoc21</a>  152 Comments	<a href="#">monu2</a>  150 Comments	<a href="#">Irfan Ali1</a>  139 Comments	<a href="#">Iñheçêñt PrNçê</a>  128 Comments	<a href="#">Reinanena</a>  101 Comments
<a href="#">emilykr97</a>  98 Comments	<a href="#">frpass</a>  97 Comments	<a href="#">sinking79</a>  97 Comments	<a href="#">Stormie Shadle</a>  82 Comments	<a href="#">dts5000</a>  81 Comments

## ACHIEVEMENT

					
Active Poet	Verified Poet	Super Poet	Awesome	Bada**	MVP
					
TMI	Night Owl	Velez Junior			

# #POETRYWARS



**Karu** @ChasingKaru · 29 Apr 2014

Little we know, Bigger we expect. We often want the truth, but get satisfied with a lie. #poetrywars



**powerpoetrywars** @powerpoetrywars · 29 Apr 2014

Replying to @ChasingKaru

@ChasingKaru Your poem scored 51.0%. For a detailed explanation see: [war.powerpoetry.org/?route=poetic/...](http://war.powerpoetry.org/?route=poetic/...)

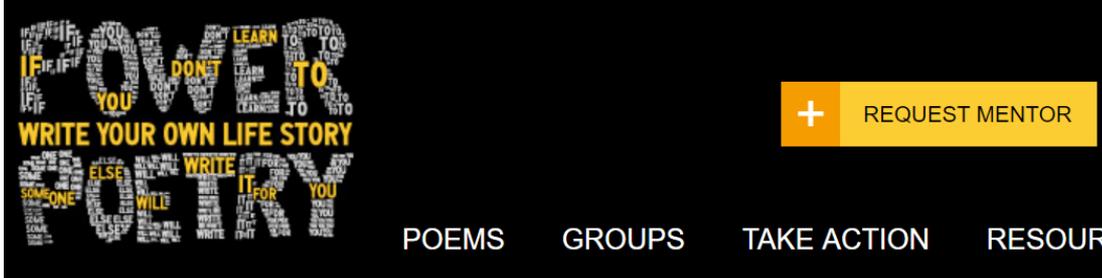


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# Feedback couldn't scale



## POWER POETRY MENTORS

Every serious poet, somewhere along the line, needs someone whom they trust and respect to give them detailed guidance and feedback on their work as Rainer Maria Rilke did in his Letters to a Young Poet: "I can't give you any advice but this: to go into yourself and see how deep the place is from which your life flows." Our mentors are here to help, so feel free to read their bios, their poetry, and reach out to any number of them with whom you would like to share your work.

### AUBRIE



Aubrie is a Smith College graduate and current Tutor Corps member at Great Oaks Charter School. She is passionate about human rights and youth empowerment, and has a deep love for hedgehogs. She became a Power Poetry mentor because she knows how important and beneficial it is to hear someone's silent voice, and to have an outlet for her own voice. She writes poetry whenever she feels inspired and she would love nothing more than to help you improve your work and to compliment you on your poetic genius.

### CYNTHIA



Cynthia is a writer, public speaker, and spoken word artist. She believes in using poetry to stand for justice, educate others, celebrate life, open the heart, and create beauty. In December, she will graduate from Hampshire State University with a bachelor's degree in Integrative Studies, with concentrations in English and Writing. Although Cynthia writes in various styles, spoken word poetry opened the door to many events and opportunities. She is a guest speaker and poet at camps, theaters, schools, open mics, and churches. She was the opening act for Emmy award winning journalist, as well as well-known actor Ansa Woodley, in her show *Mama Jaggz*. She performed in honor of the Justice Conference, a conference that features internationally acclaimed speakers who are dedicated to inspiring a movement for justice. She recently published her poetry in *Shine*, an art and literary magazine. She is humbled and excited for the chance to use her knowledge of written and performance poetry to inspire and empower young poets. Cynthia joined [Power Poetry](#) to combine her passions for writing and helping others in a new way. You can see some of her work on her website, [Cynthia Inspires](#), on [YouTube](#), and her [Facebook](#) page.

### HAMZA



Hamza began writing poetry during the summer after his Junior year in high school. After listening to Hip Hop for nearly his entire life, he stumbled upon the realization that Hip Hop, in all of its nuances and senses, is poetry. The artists that had taught him lessons through their work inspired him to do the same for others. As Hamza immersed himself in lyrics, rhymes, and flows of his favorite artists, he developed his own style—an amalgam of the same messages his heart preached through his headphones. "When God Calls" is an example of his work. Hamza is currently an active member in his community and has performed Spoken Word for numerous organizations and events. He updates his blog, [JazzHamza.com](#), with a new poem each week and records his poems whenever he has the time. His best advice for any poet is to write from their heart because, he believes, everything else will follow.

- Tested a "Request Mentor" feature for poets leading to **4,000 requests in 2 days**
- Early program to train volunteers to respond to poetry feedback failed to keep up with demand.
- Failing to keep the user promise, it was discontinued.



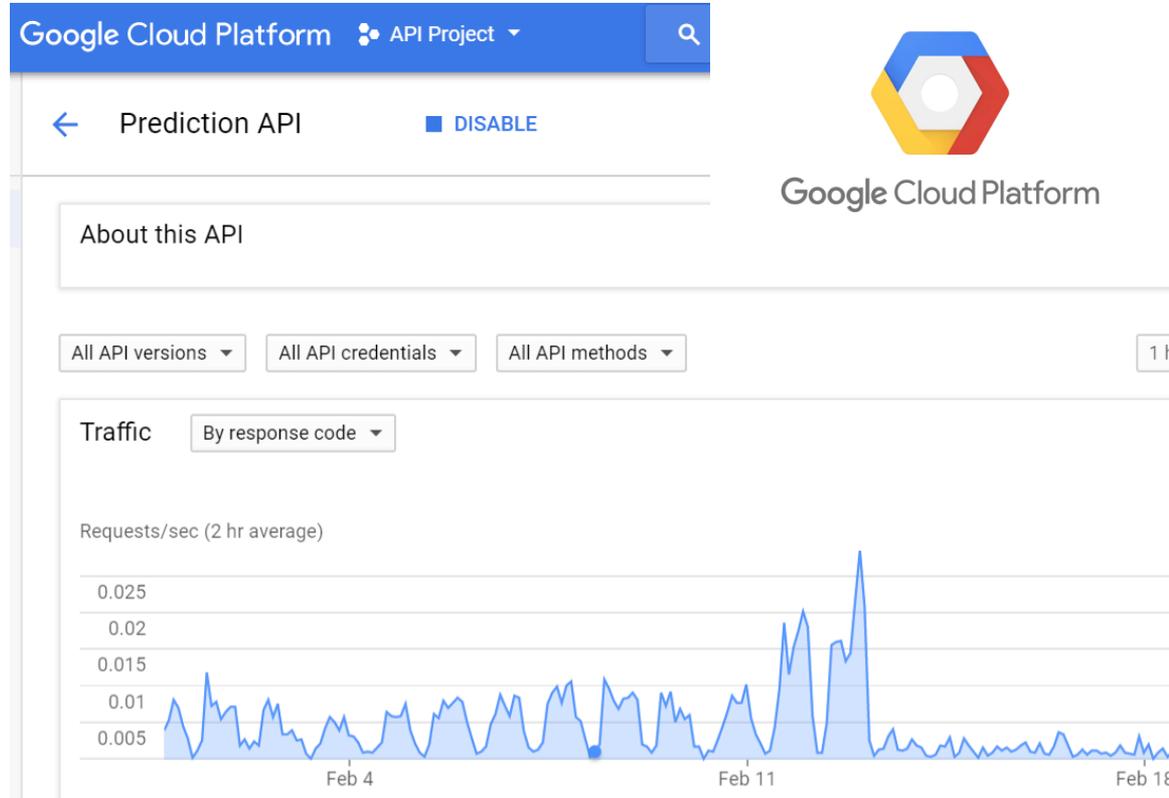
# POETRY GENOME

Rapper	Score (%)
<u>Kendrick Lamar</u>	3.7
<u>Wale</u>	3.7
<u>Gucci Mane</u>	3.5

# Supervised Learning

Google Cloud Prediction API allows high volume of requests during peak periods.

Data are then locally stored to reduce load on API.



Google Cloud Platform

# Training Set



- 30 Top Rap artists
- 10+ cleaned songs, verse only with chorus hook removed

	A	B	C
1	Artist	Verse	Song
	Kendrick Lamar	Ayy, I remember syrup sandwiches and crime allowances Finesse a nigga with some counterfeit, but now I'm countin' this Parmesan where my accountant lives; in fact, I'm downin' this D'USSÉ with my boo bae tastes like Kool-Aid for the analysts Girl, I can buy yo' ass the world with my paystub Ooh, that pussy good, won't you sit it on my taste bloods? I get way too petty once you let me do the extras Pull up on your block, then break it down: we playin' Tetris A.M. to the P.M., P.M. to the A.M., funk Piss out your per diem, you just gotta hate 'em, funk If I quit your BM, I still ride Mercedes, funk If I quit this season, I still be the greatest, funk My left stroke just went viral Right stroke put lil' baby in a spiral Soprano C, we like to keep it on a high note It's levels to it, you and I knowWho dat nigga thinkin' that he frontin' on Man-Man? (Man-Man) Get the fuck off my stage, I'm the Sandman (Sandman) Get the fuck off my dick, that ain't right I make a play fucking up your whole life I'm so fuckin' sick and tired of the Photoshop Show me somethin' natural like afro on Richard Pryor Show me somethin' natural like ass with some stretch marks Still will take you down right on your mama's couch in Polo socks Ayy, this shit way too crazy, ayy, you do not amaze me, ayy I blew cool from AC, ayy, Obama just paged me, ayy I don't fabricate it, ayy, most of y'all be fakin', ayy I stay modest 'bout it, ayy, she elaborate it, ayy This that Grey Poupon, that Evian, that TED Talk, ayy	Humble
2			

# Why remove the Chorus?

## “HUMBLE” Chorus

(Hol' up bitch) sit down,  
 (Hol' up lil bitch, hol' up, lil bitch) be humble  
 (Hol' up bitch) sit down (sit down hol' up lil bitch)  
 Be humble (bitch)  
 (Hol' up, hol' up, hol' up, hol' up) bitch sit down  
 Lil bitch (hol' up lil bitch) be humble  
 (Hol' up bitch) sit down  
 (Hol' up, hol' up, hol' up, hol' up) be humble  
 (Hol' up, hol' up, hol' up, hol' up lil bitch) sit down  
 (Hol' up lil bitch) be humble  
 (Hol' up bitch) sit down (hol' up sit down lil bitch)  
 (Sit down lil bitch) be humble  
 (Hol' up, hol' up, hol' up, hol' up lil bitch) bitch, sit down  
 (Hol' up lil bitch) be humble  
 (Hol' up bitch) sit down  
 (Hol' up, hol' up, hol' up, hol' up)

Literary Value: Low

## “HUMBLE”

But now I'm counting this  
 Parmesan where my accountant lives in fact I'm down at this  
 D'usse with my boo bae, tastes like kool aid for the analysts  
 Girl, I can buy your ass the world with my paystub  
 Ooh that pussy good, won't you sit it on my taste bloods  
 I get way too petty once you let me do the extras  
 Pull up on your block, then break it down we playing Tetris  
 A.M. to the P.M., P.M. to the A.M. funk  
 Piss out your per diem you just gotta hate em, funk  
 If I quit your BM I still ride Mercedes, funk  
 If I quit this season I still be the greatest, funk  
 My left stroke just went viral  
 Right stroke put lil baby in a spiral  
 Soprano C, we like to keep it on a high note  
 It's levels to it, you and I know, bitch be humble

Literary Value: High(er)

# Genome in Action



## BEAUTIFUL BLACK WOMAN

Tue, 11/20/2012 - 23:46 – [cwoods2119](#)

Beautiful woman this poem is for you  
Full of beauty and grace  
Rare black Queen sitting high on your throne  
No one can take your place  
Your heart is full of pure gold  
Never to be played with  
Bought or sold  
Your Love is Patient Your Love is kind  
Always trying to bring joy to others even when you can't do it for yourself  
And keeping them close in mind  
A good woman is what you are  
A woman to whom is proud of who she is and what she stands for  
Never seeking definition from whom she is with  
A strong woman is what I see when I look at you  
One who can pick up the small pieces of her broken heart  
And carry on as if she was never hurt in the first place.  
When talking about this woman I can't help but smile  
Knowing the woman that I can speak so highly of is ME.



## POETRY GENOME

Rapper	Score (%)
<u>Isaiah Rashad</u>	4.0
<u>Nas</u>	3.6
<u>Wale</u>	3.5

45280 reads for this poem

# Discovery

## ISAIAH RASHAD



Isaiah Rashad McClain AKA Isaiah Rashad

### Educational Background and Location

[Middle Tennessee State University](#), Chatanooga TN

### Brief Personal Bio

Isaiah Rashad was raised into becoming a preacher until he found his calling to music when he listened to a copy of OutKast's ATLiens album which inspired him. He then began ditching school to record music and his career took off from then.

### These are a Few of Their Favorite Things

- Favorite Books (as a child/teen)–Dragon Ball Z comics, “Cat in the Hat”, “One Fish, Two Fish”, “Twilight”

### Common Literary Elements/Structure/Themes in their Work

Isaiah Rashad "bleeds his influences and idols into a lo-fi jazzy intimate portrait of his life, adding layers to the original music that inspired him".

### Link to Matching PP Guides/Glossary Terms

<http://www.powerpoetry.org/actions/5-tips-using-rhythm-and-rap>

<http://www.powerpoetry.org/actions/7-steps-addressing-post-racial-myth>

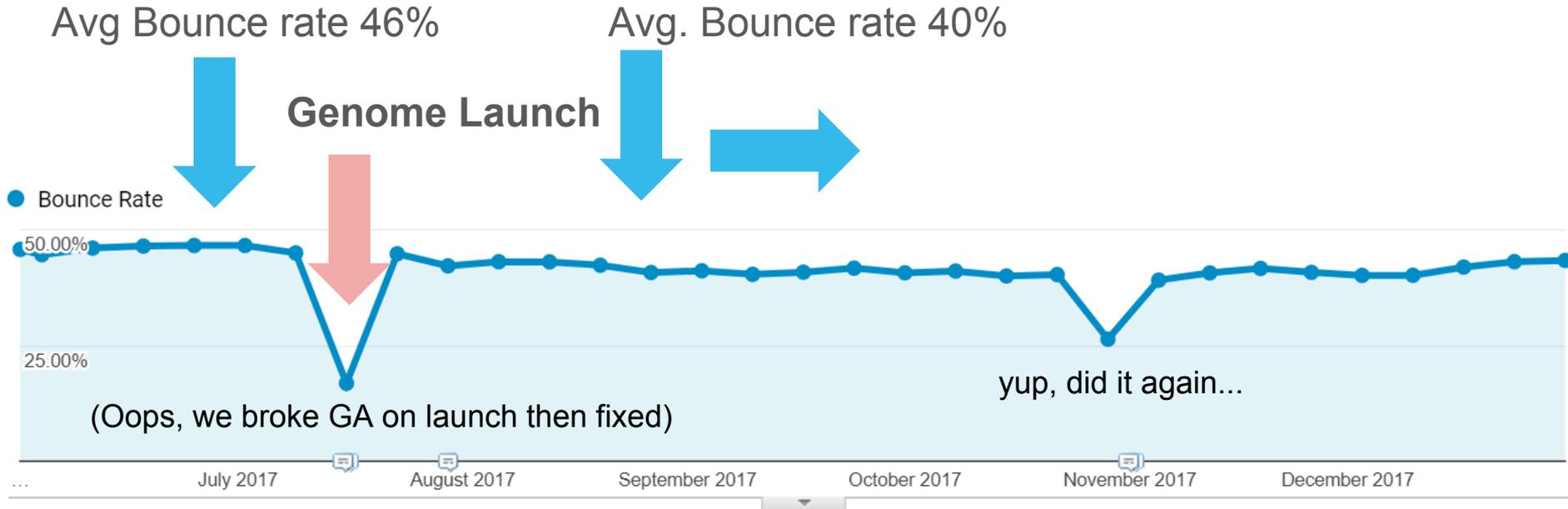
# YoY Improved Bounce & Exit



Behavior metrics for bounce rate and exit improve showing more interested users. Quantity metrics also increase but can't be completely attributed to Poetry Genome

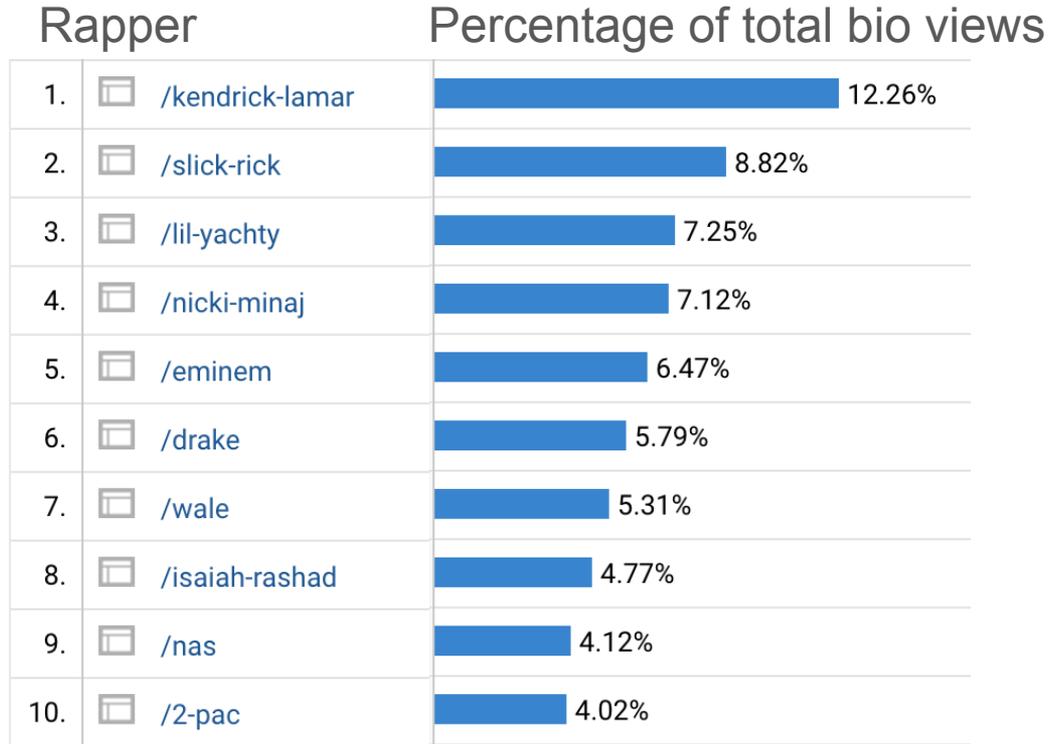
Page path level 1 ?	Pageviews ? ↓	Unique Pageviews ?	Bounce Rate ?	% Exit ?
	40.93% ↑ 803,824 vs 570,361	41.48% ↑ 701,662 vs 495,934	15.20% ↑ 40.48% vs 47.74%	6.70% ↓ 51.50% vs 55.20%
1. <a href="#">/poems/</a>				
Jul 20, 2017 - Dec 31, 2017	803,824 (100.00%)	701,662 (100.00%)	40.48%	51.50%
Jul 20, 2016 - Dec 31, 2016	570,361 (100.00%)	495,934 (100.00%)	47.74%	55.20%
% Change	40.93%	41.48%	-15.20%	-6.70%

# Attributed to Poetry Genome



Bounce rate PowerPoetry.org/poems/\* June 1, 2017- Dec 31st, 2017

# Encourage Discovery



# 99 problems and Classification is one...



## Classification Problems

Complexity & dimensions

Overfitting

BETA! Don't make perfect the enemy of done.

Rapper	Score (%)
<u>De La Soul</u>	4.0
<u>T.I</u>	3.8
<u>Wale</u>	3.7

# Curious Poets



Dear Power Poetry,

I hope all is well. I'm just emailing you to inquire more about the **rapper score** tagged to poems? **I'm not sure exactly what they mean or how it's determined**, etc. Any and all help regarding the rapper score is greatly appreciated.

Best regards,

Jeffrey Phillips II

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# Getting Smarter

Add new categories and build more cognitive bridges to increase literary exploration

**academy of  
american poets**

Famous American Poet	Score (%)
<u>Langstone Hughes</u>	28.4
<u>Emily Dickinson</u>	16.8
<u>Walt Whitman</u>	9.0

# ML That Matters

## We Don't Care

If drones can deliver beer faster to bros,  
or put bodegas out of business



*Image credit: Unmanned Systems Technology*

## We Care

About increasing the quality of learning  
hours for teens that need it the most.



# Mission: 1,000,000 by 2023

Have: Partners, Poets, or Pennies?  
Contact: [ann@wholewhale.com](mailto:ann@wholewhale.com)