Disposable Universes And Games You Can't Quit

Strange Futures For AI In Games

Michael Cook (@mtrc)

The Metamakers Institute, Falmouth University

gamesbyangelina.org

Level Design

Mouse Of The Dead

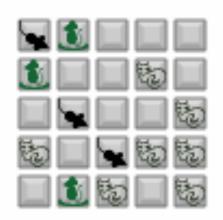
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Playout



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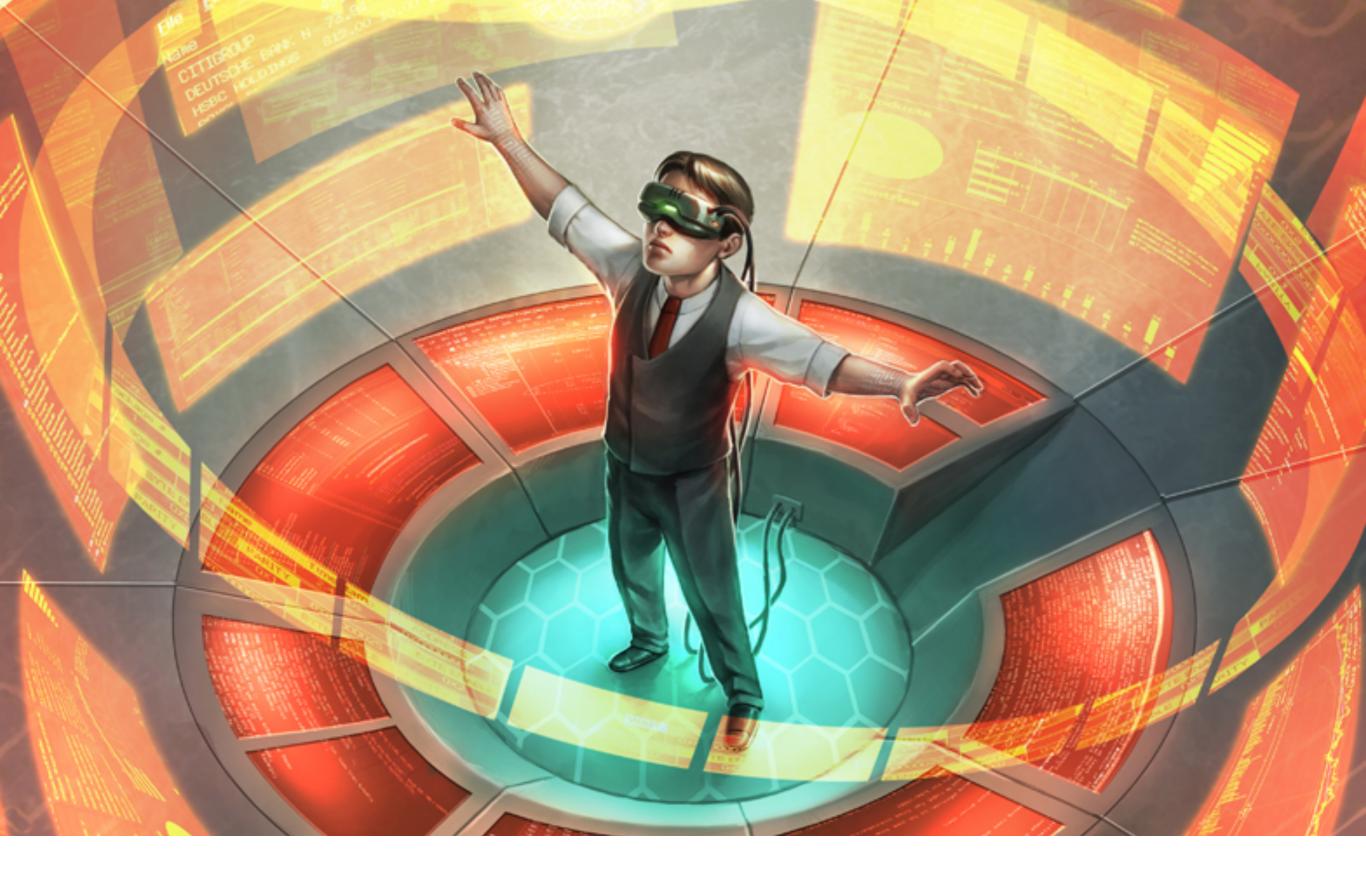
(Find us in the Rock, Paper, Shotgun room!)



It's 2018



"Al For Games" means exactly one thing



What other futures are possible with AI?

I

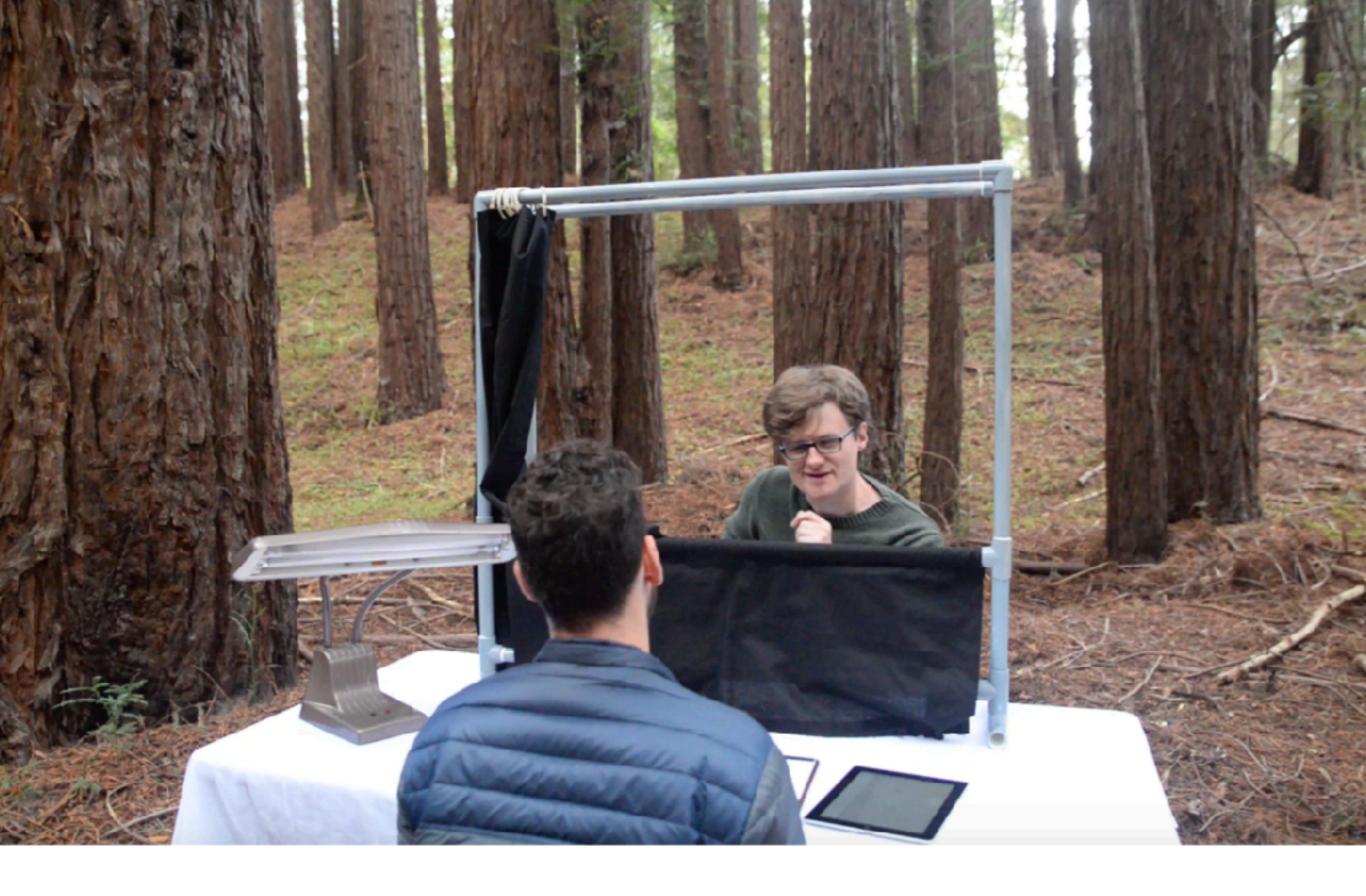
Disposable Universes



Procedural generation is awesome



Most procedural generation is set dressing



Bad News







Name: ???

Parents: ???

Born: ???

Lives: ???



Extroversion: somewhat low

Agreeableness: neutral | Neuroticism: low

Openness: high

Conscientiousness: somewhat high | Age: 45

Skin: light Hair: short, brown Tattoo: no

Scar: no Birthmark: no Freckles: no

Glasses: yes Purpose Here: work

Other People Here: [Player can see]

Marital Status: single | Moved to Town: birth

Home Address: 655 Wartrace Street (Unit #10) (since 1950)

Job Status: employed

Job: Day bartender at Chodlates (since 1965)

Job Address: 608 Cardiff Avenue





Knows About Self

Name: Mary Gold

Parents: Eli and Mandana Gold

Born: ...

Lives: ...

Knows About Soraya Winters

Name: Soraya Winters (100%)

Parents: ???

Born: ...

Lives: 22 Adelaide Ave (75%)

Tattoo: Wario (40%)



Wizard Actor

My Name is: Cecil Jack Senn

Town Name: Ketchikan Current Date: Day of August 20, 1979 My Location: Chodlates Address Here: 608 Cardiff Avenue
Next of Kin: !Rosemary Thies (my neighbor; at Schoettle residence)

Me

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Subject of Conversation

First name: Rolland (positive) Last name: Thies (positive)

Status: alive (positive) Death year: None (pretty sure)

Departure year: None (pretty sure) | My sources: myself (100%)

Relations to me: neighbor | Charge: - | Spark: - | Age: 19 (somewhat sure)

Job status: employed (sure) secretary (positive) *Job shift:* day (sure)

Workplace: Wartrace Street Realty (positive) Skin color: light (positive)

Hair color: black (sure) Hair length: long (sure)

Facial hair: none (somewhat sure) Tattoo: no (positive) Scar: no (positive)

Birthmark: no (somewhat sure) Freckles: no (not confident)

Glasses: yes (not confident) | Spouse: single (positive)

Parents: !Rosemary Thies (alive), Herman Thies (dead) Kids: ?

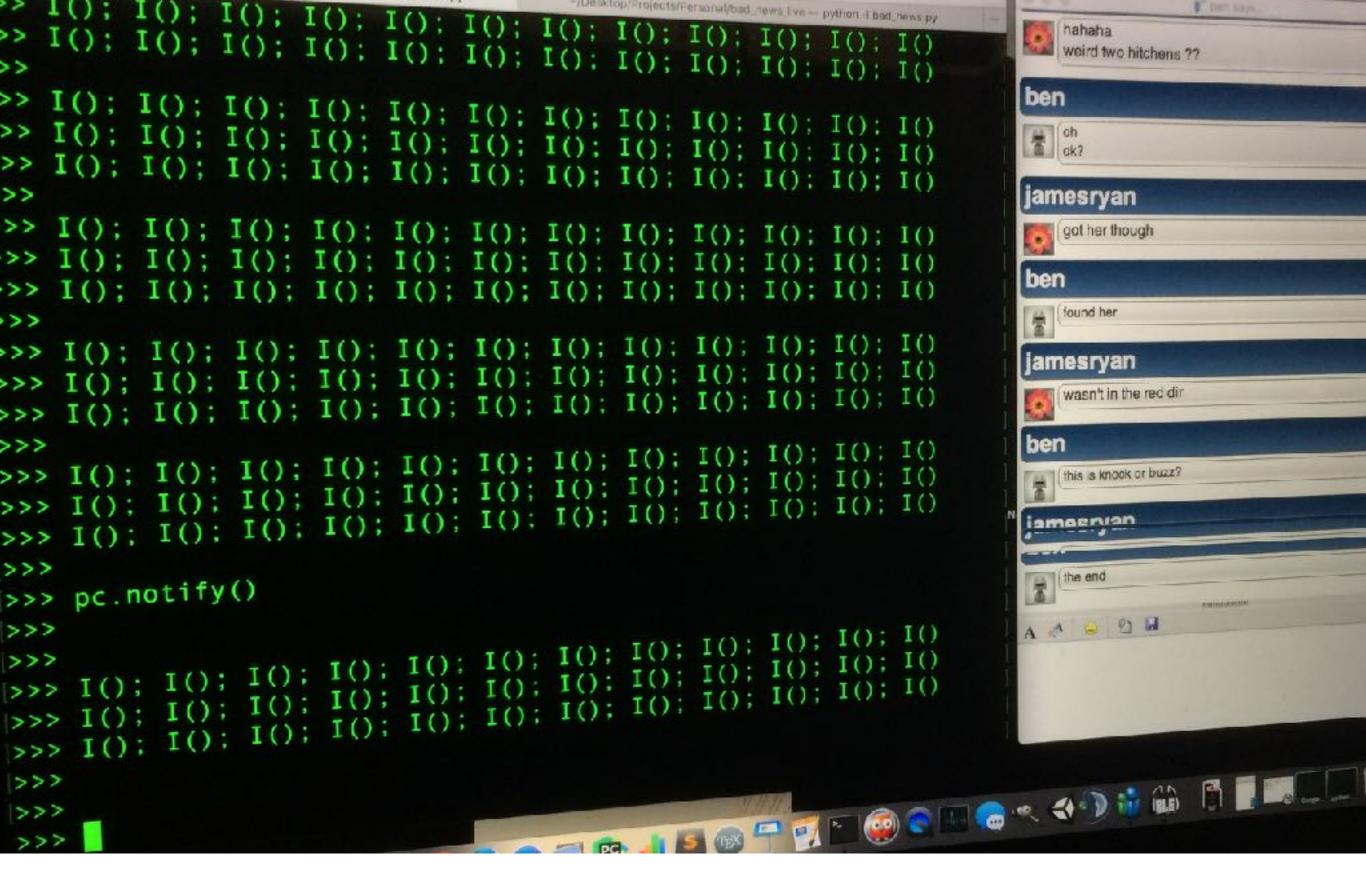
Siblings: Nancy Thies (alive), James Thies (alive), Sharon Thies (alive), Andrea Thies

(alive)

Extended family: Donald Lemberg (uncle; alive)



The End?



Complex worlds we care about

More



www.badnewsgame.com

James Ryan, Ben Samuel, Adam Summerville

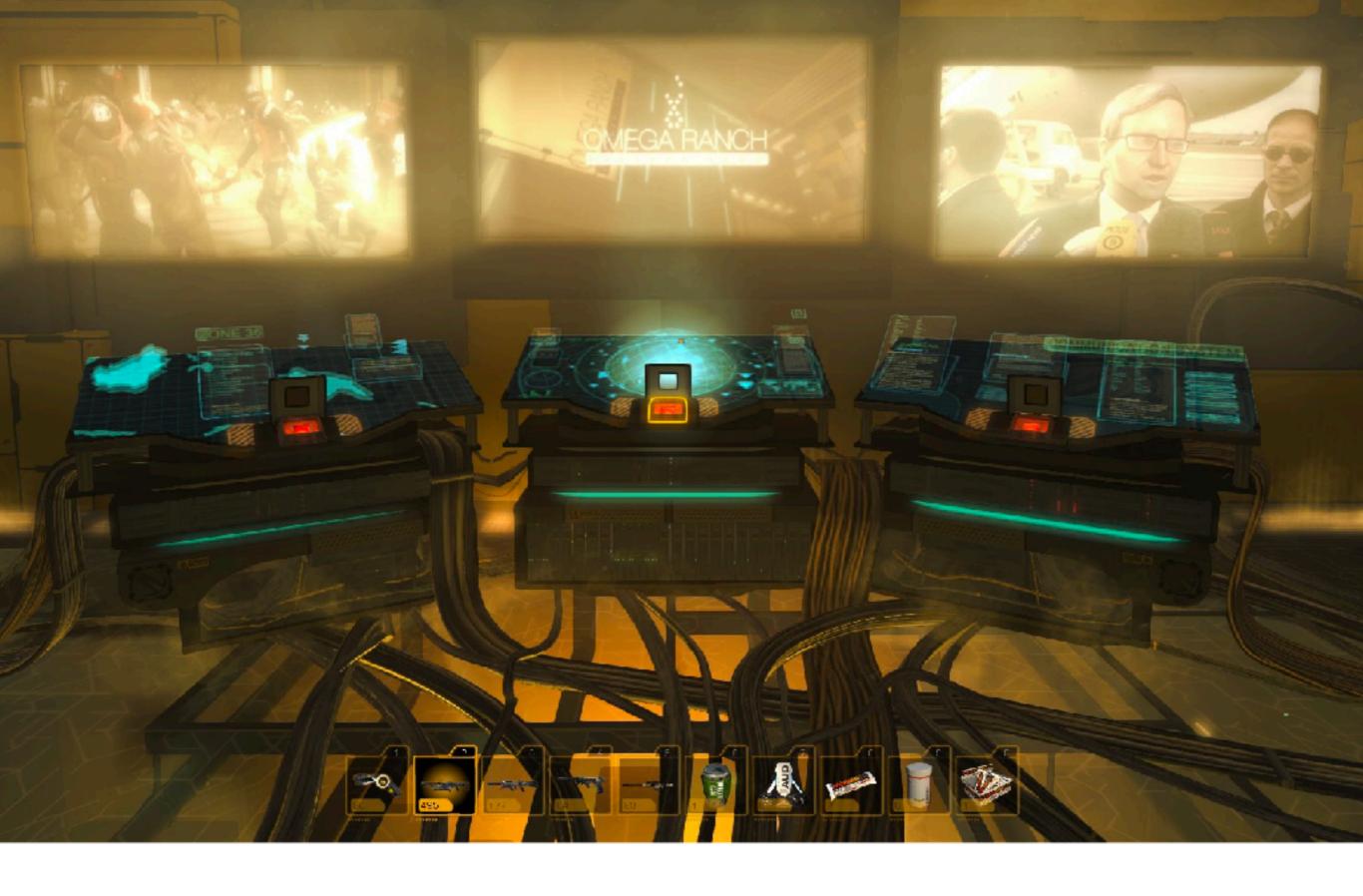
@xfoml @ThisIsBenSamuel @Autumnsburg

See Alse: Shelden County and Juke Joint

See Also: Sheldon County and Juke Joint

II

Wearing Your Choices On Your Sleeve



We like our games to be personal



And we love to tell people about it

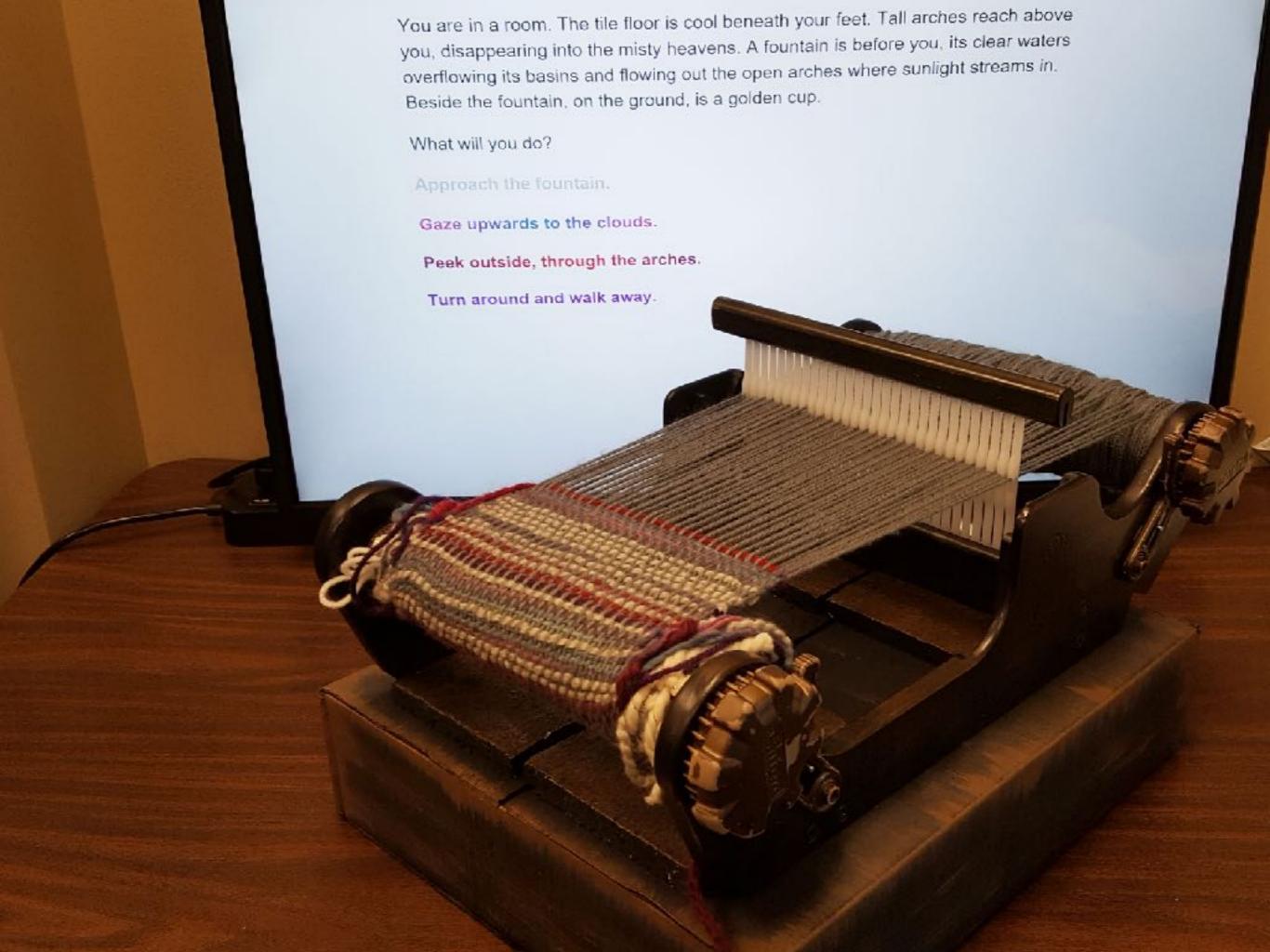


How can Al mix the digital with the physical?

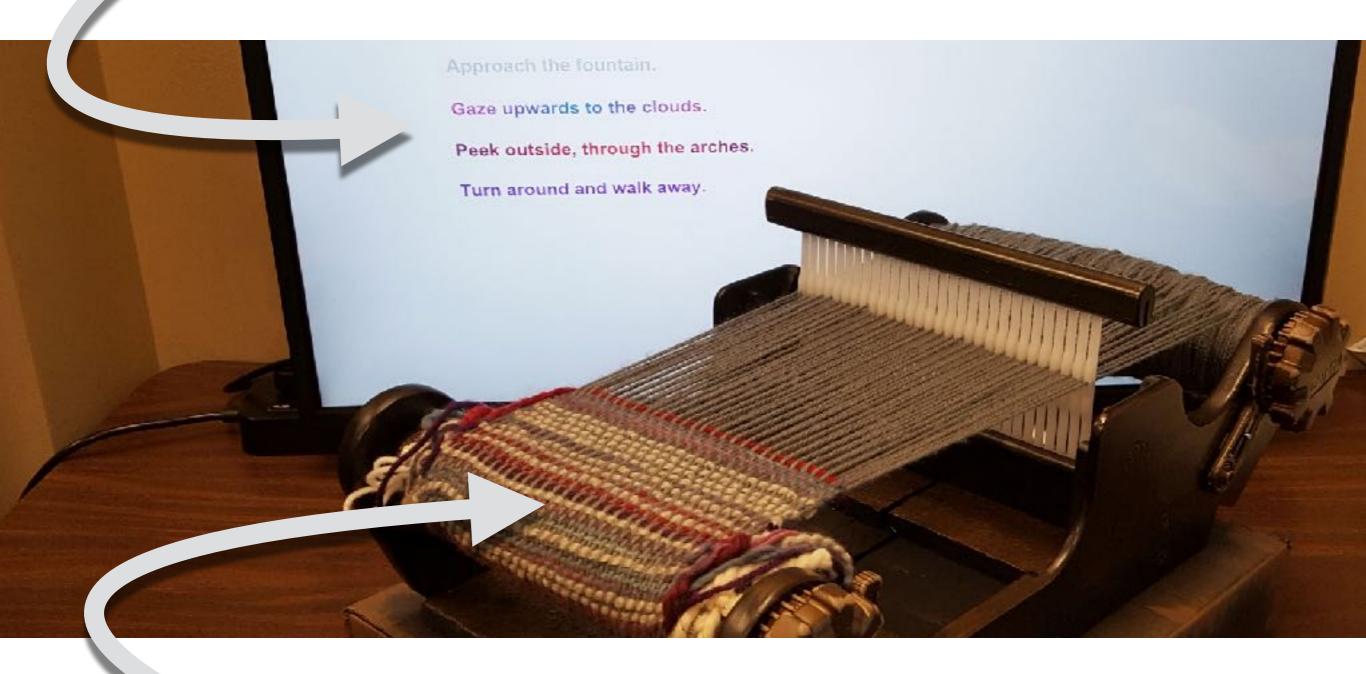
Loominary



www.loominary.info



Choices displayed on screen



Player responds by weaving the colour of their chosen option





Discovered an underground river

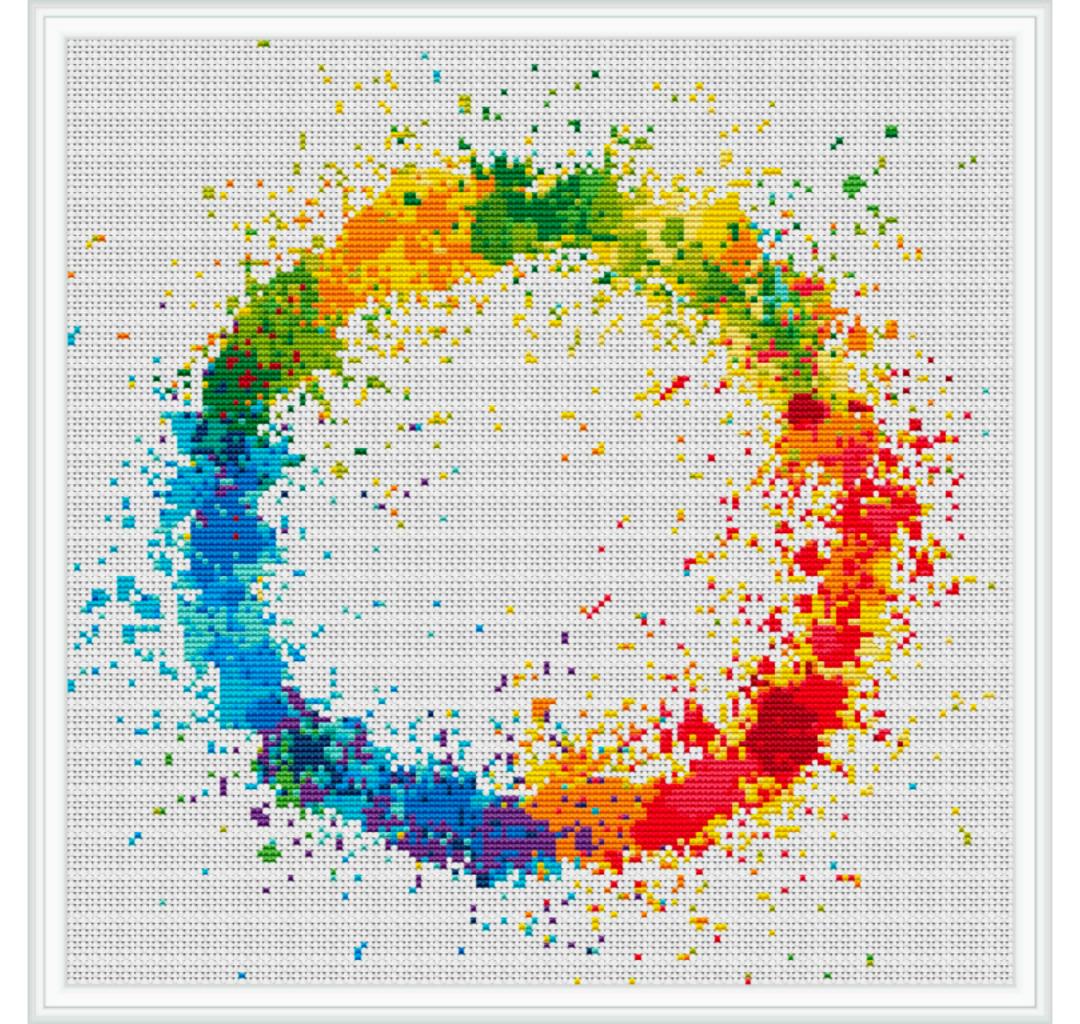
Bountiful harvest, community celebrates

Fortress destroyed by lava overflow



Hoopla (Gillian Smith)





More



www.loominary.info

Sarah Hendricks, Bri Williams, Josh McCoy, Anne Sullivan

@renegadehanar @anneandkita @deftjams

III

Digital Necromancy



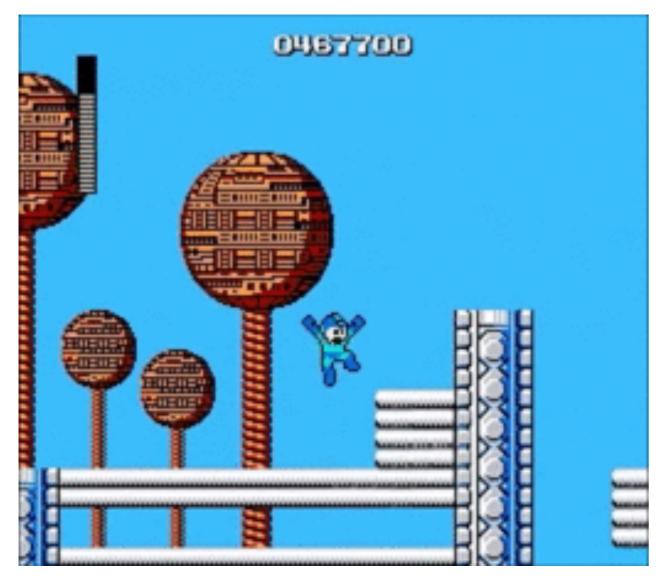
It's easy to lose games forever

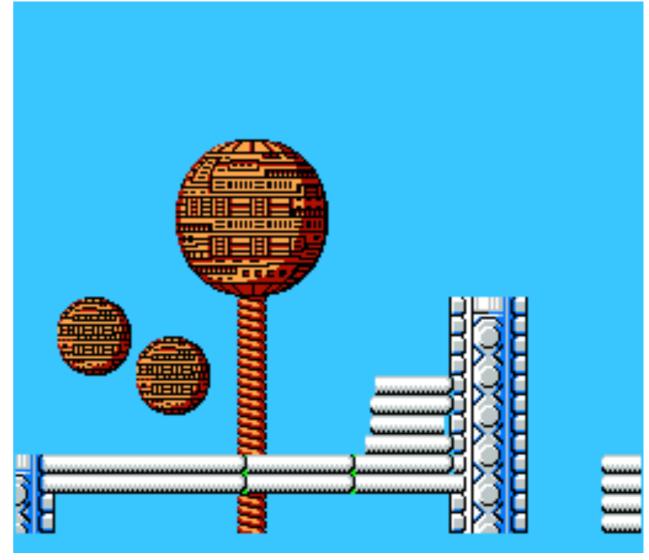


Especially from small communities



Or brief cultural moments

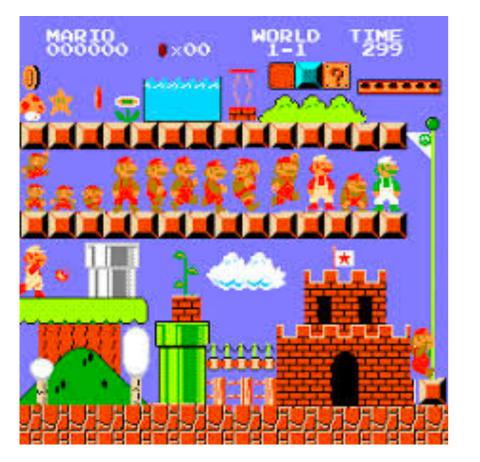


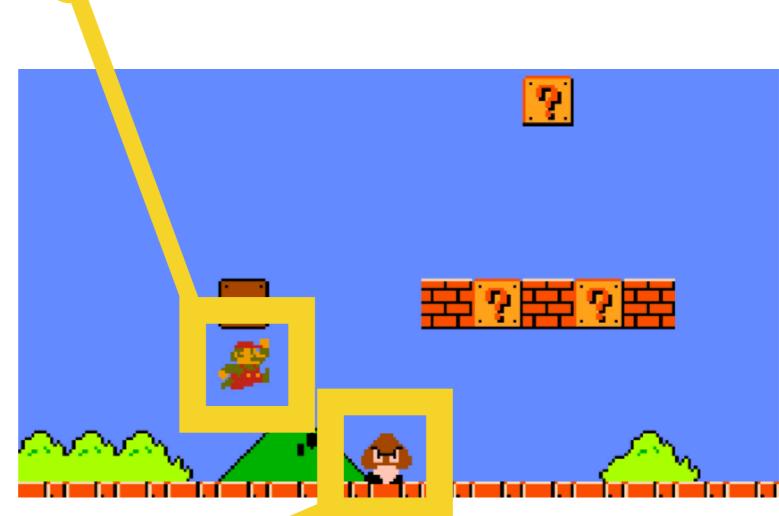


Video footage of MegaMan playthrough

Emulated version made from watching video

tiny_mario_jump



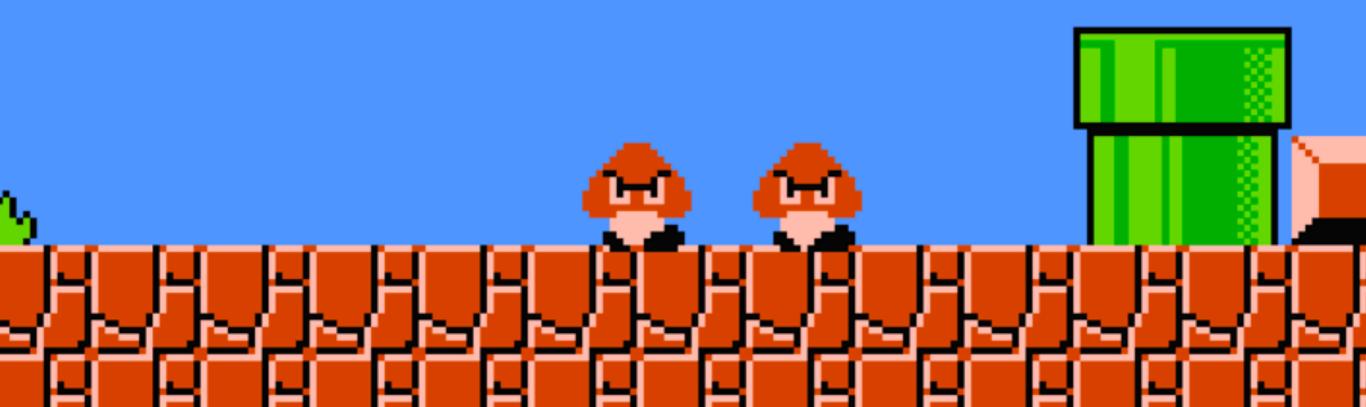


goomba_walk

The system looks at each frame, and compares it to the previous one.

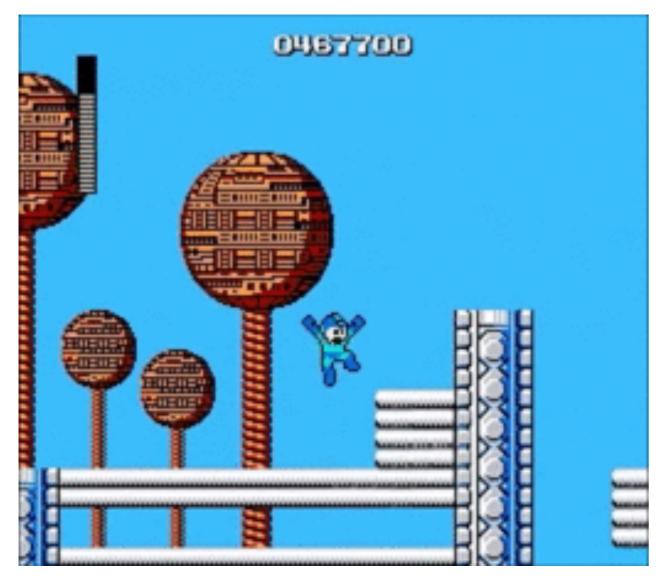


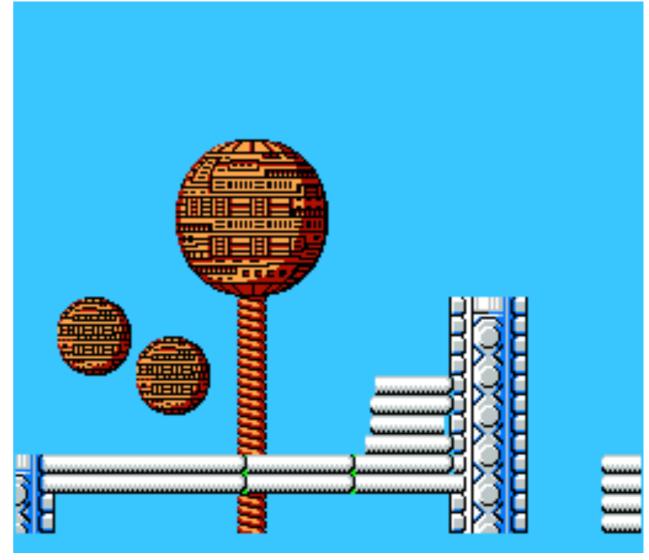




Major changes become potential rules in the game engine





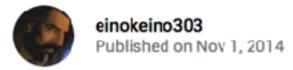


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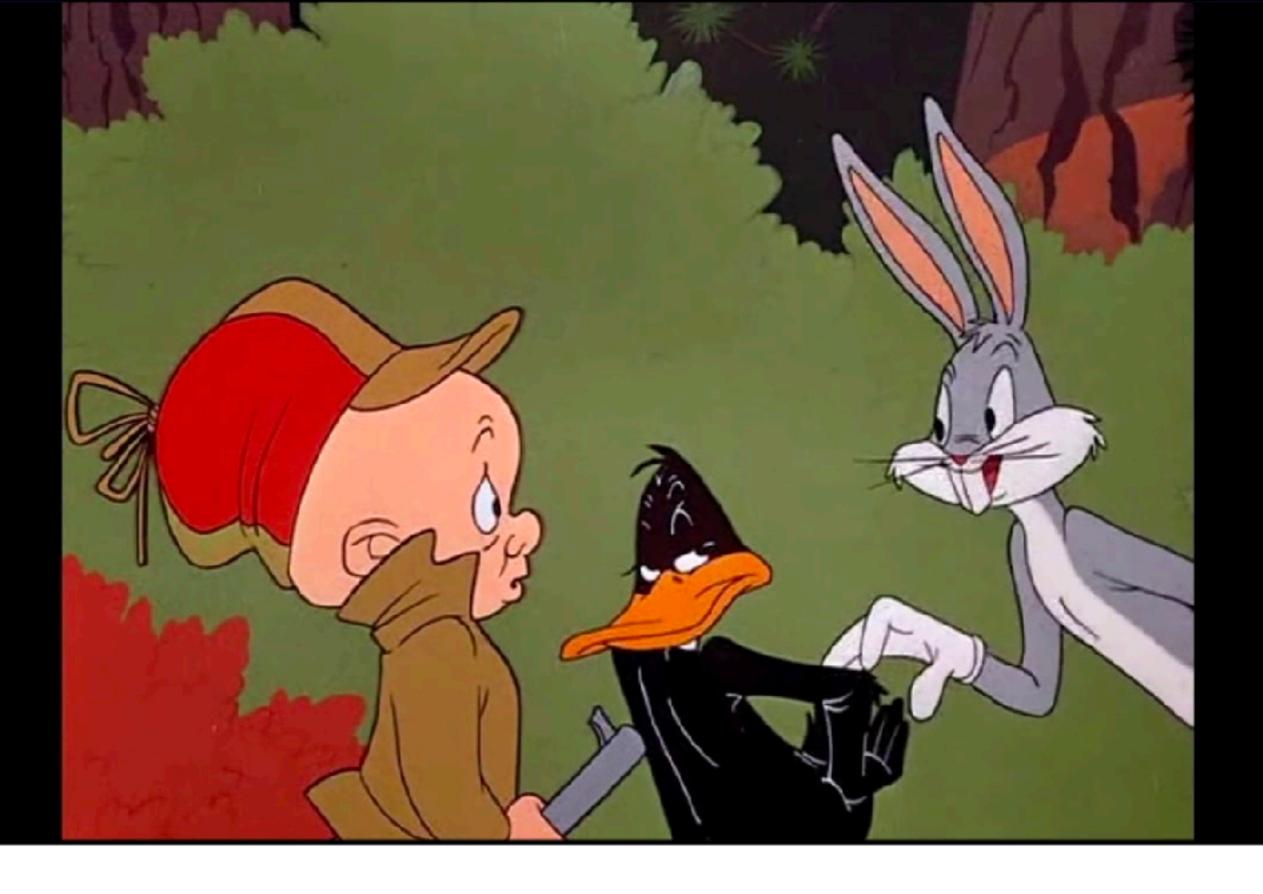


Zool (Amiga CD32) 50FPS longplay



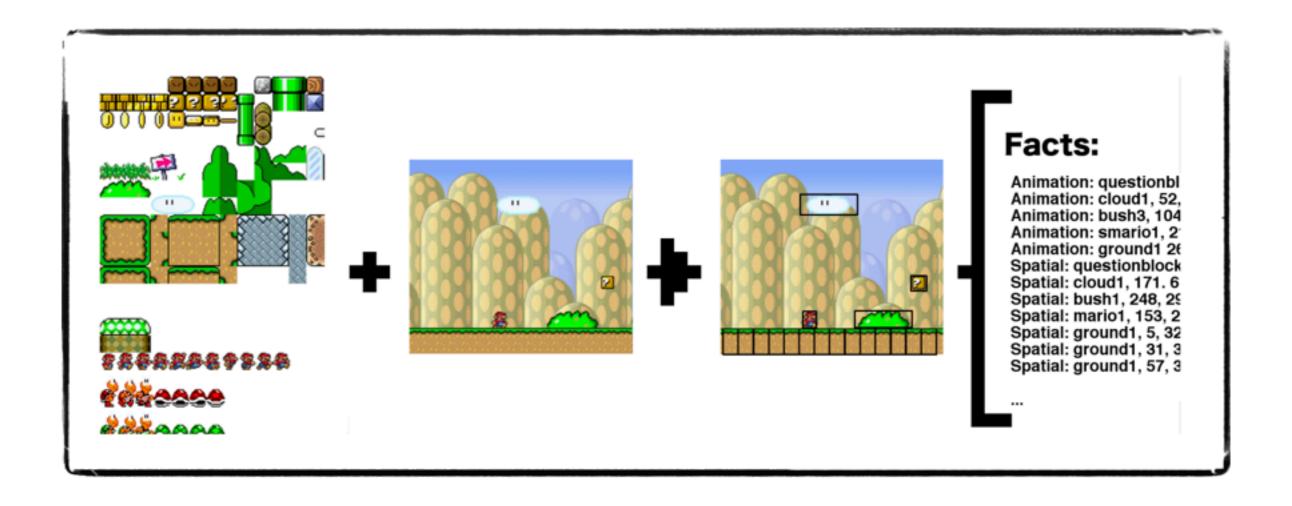
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A new tool for digital preservation



A new way of building games

More



Game Engine Learning from Video M. Guzdial, B. Li, M. Riedl

@MatthewGuz @mark_riedl

IV

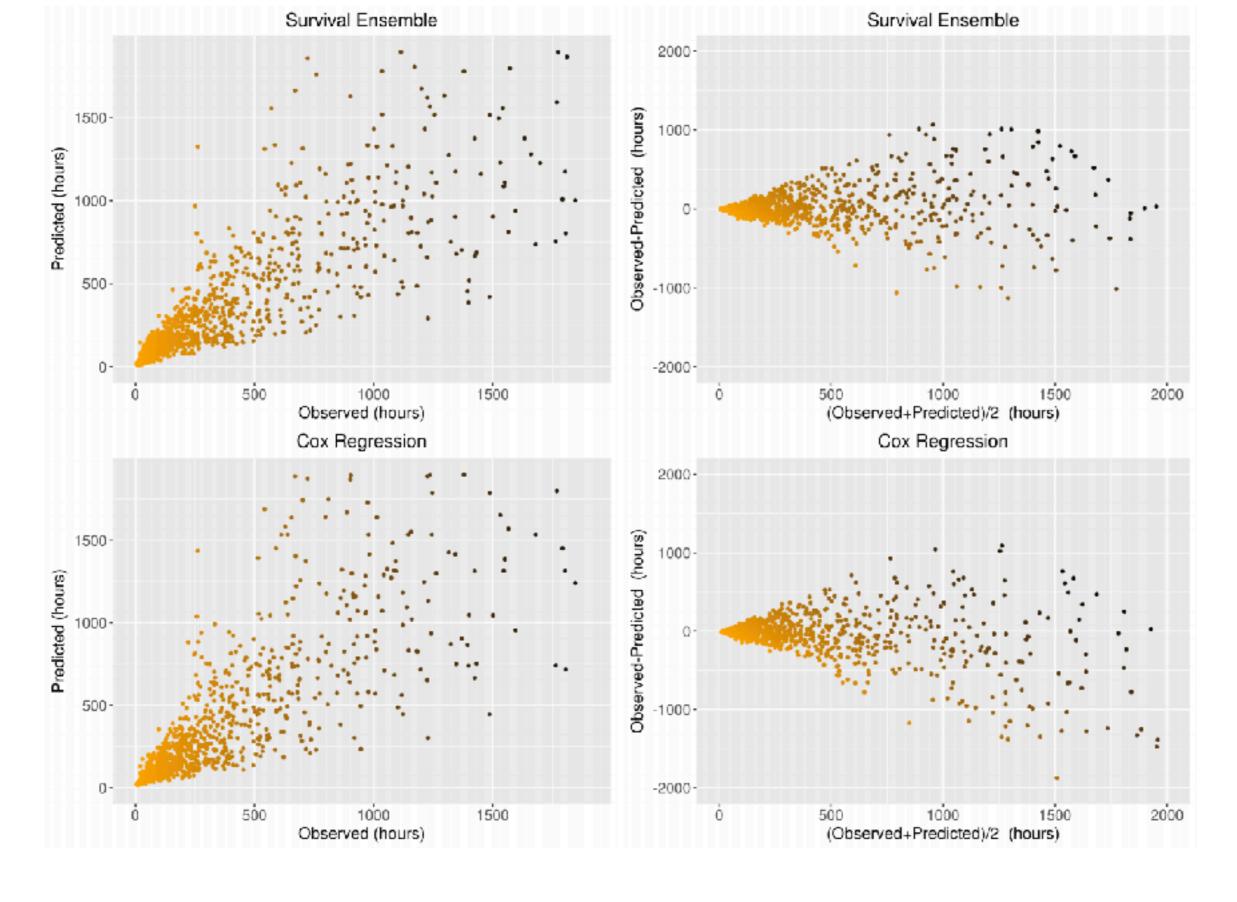
Loot Boxes That Think



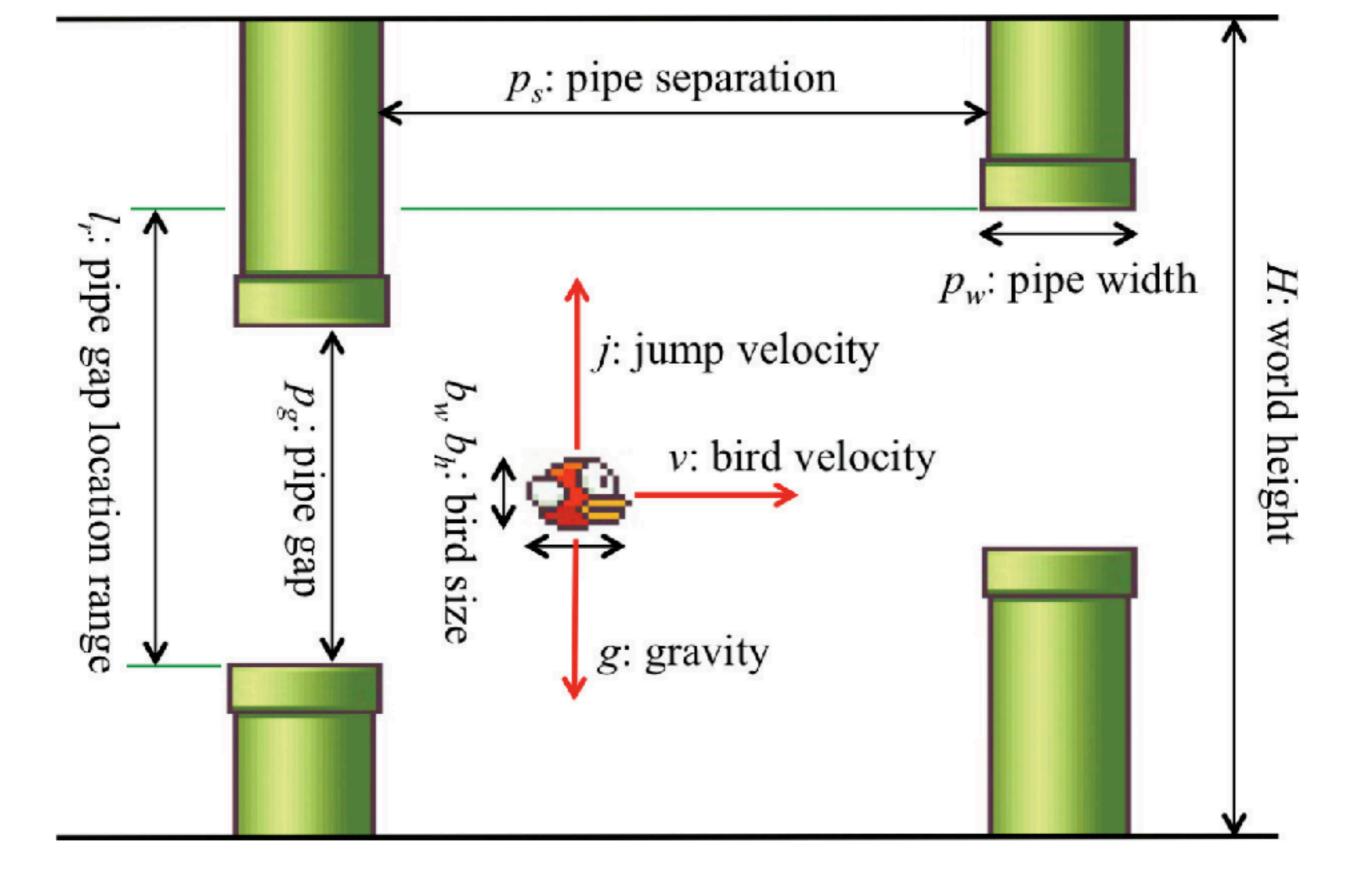
"Economic Success"



"New Business Models"



Al techniques are improving predictions



And is helping us tweak games







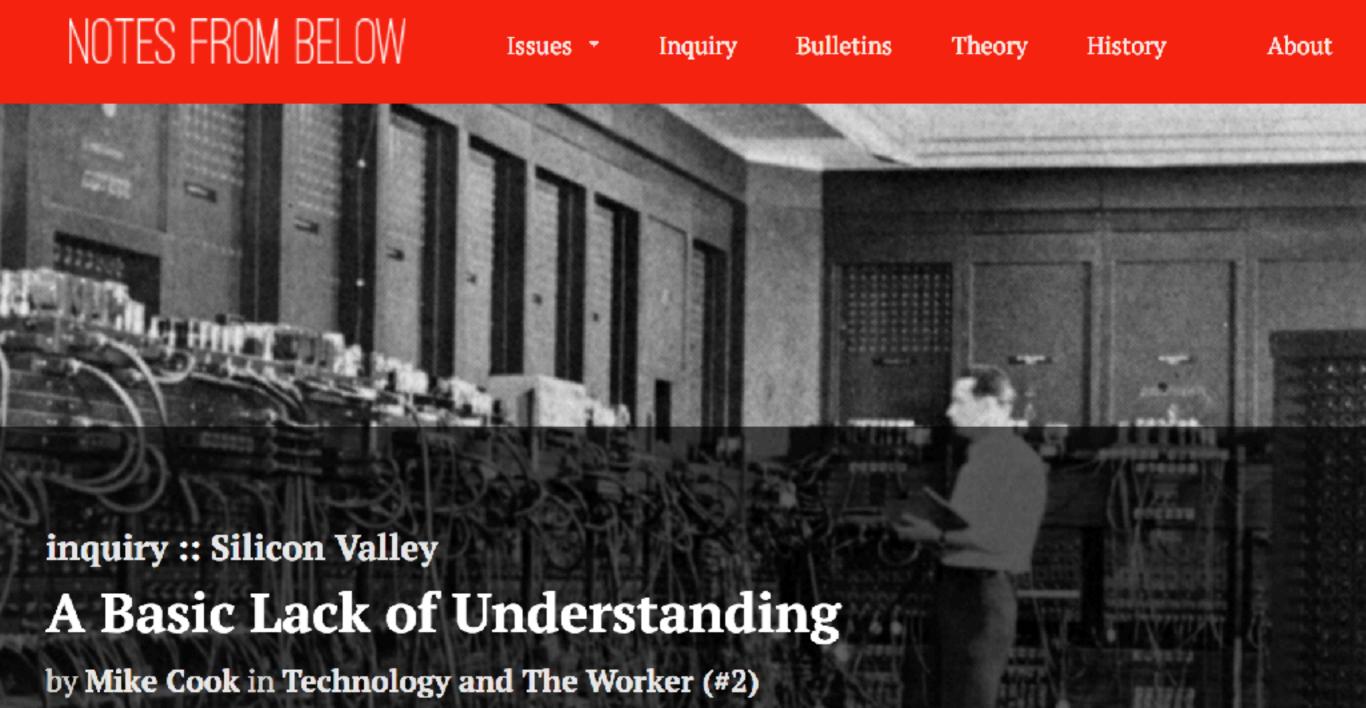
Same As The Old Business Models



Technology amplifies



As we know, this always ends well



www.notesfrombelow.org

\bigvee

AI In The Community



Despite the hubbub, Al is far off



But we can still ask questions

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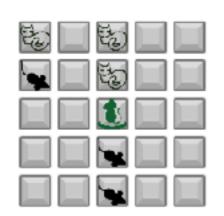
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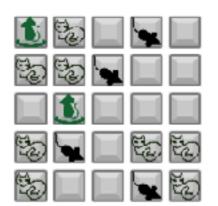
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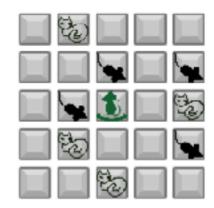
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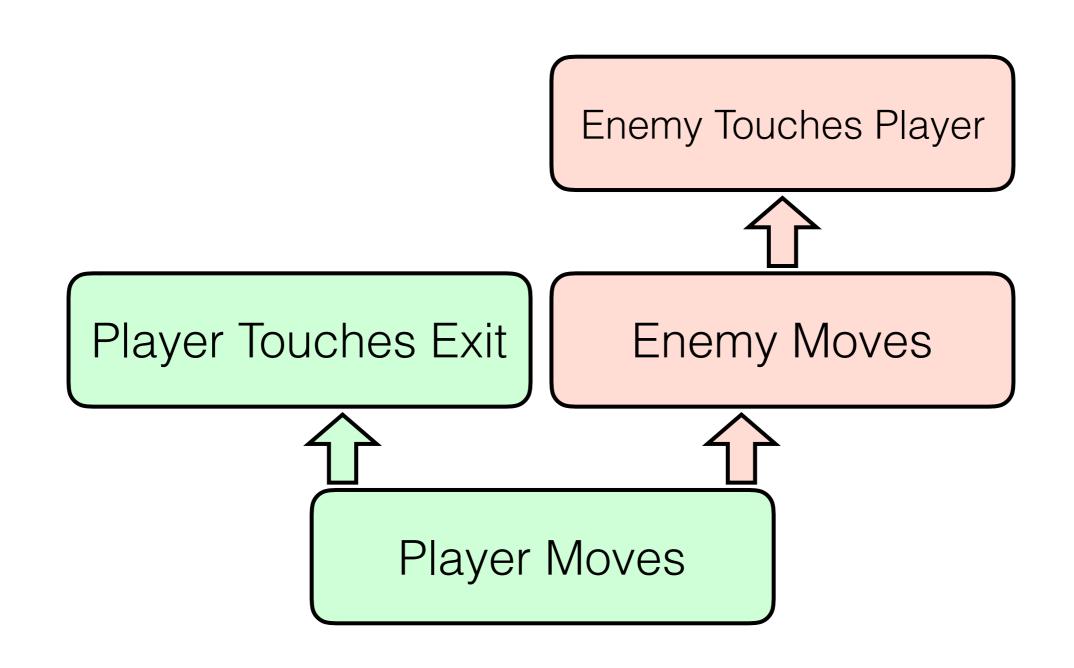
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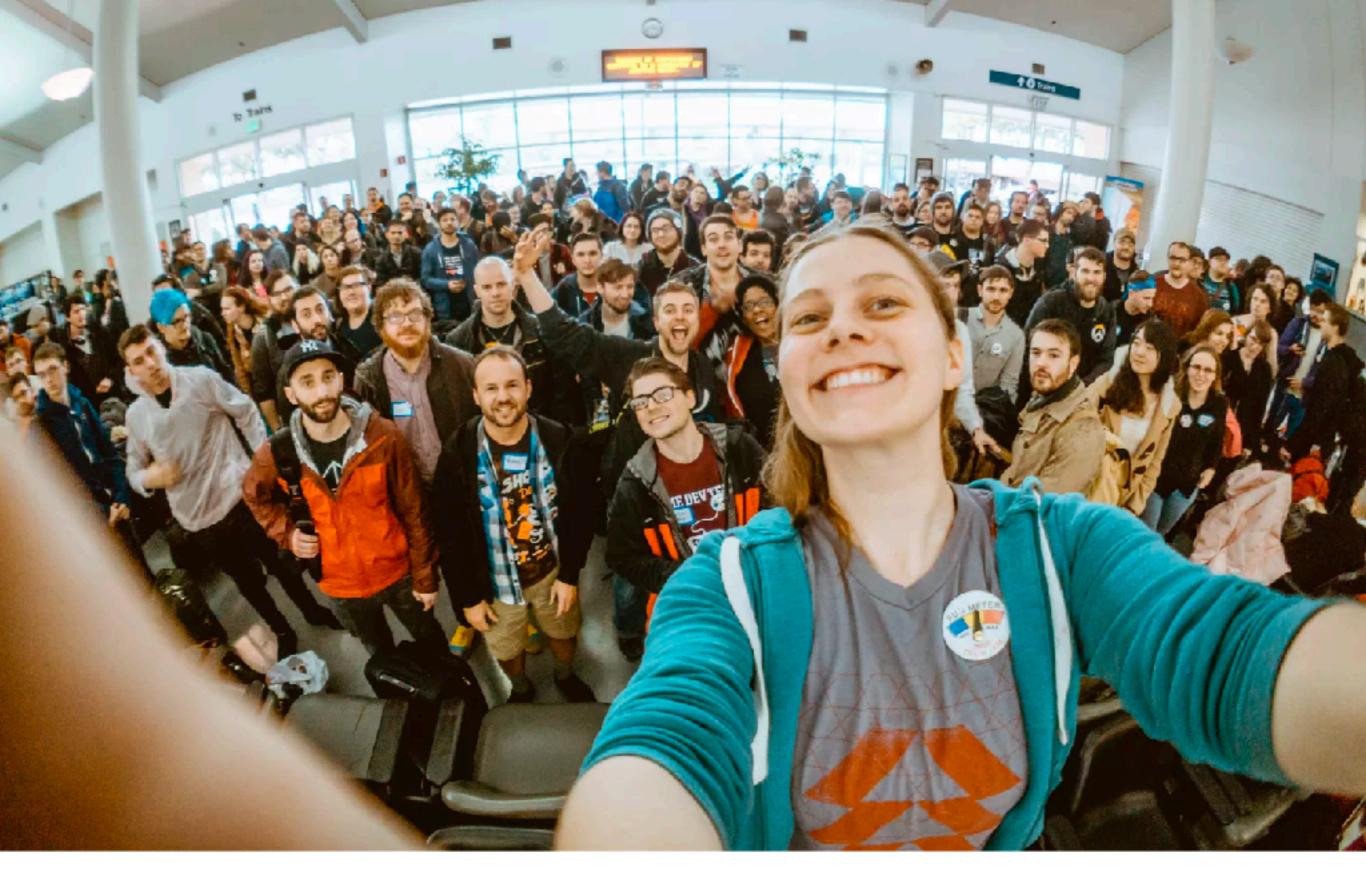












In our communities?



As influential figures?



As creative collaborators?

Level Design

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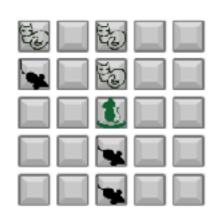
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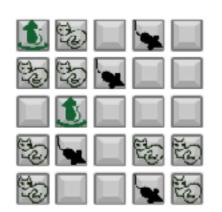
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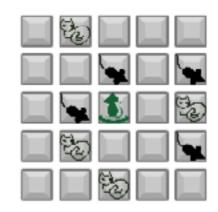
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Help me find out!

Thanks!

@mtrc

Ask me things on Twitter

www.gamesbyangelina.org

I write things about AI and games

www.procjam.com

Make Something That Makes Something

www.rogueprocess.run

Cyberpunk Action-Typer