



# Loot for Learning: Virtual Currency in a Game Design Program

Edward Castronova  
Professor, Indiana University

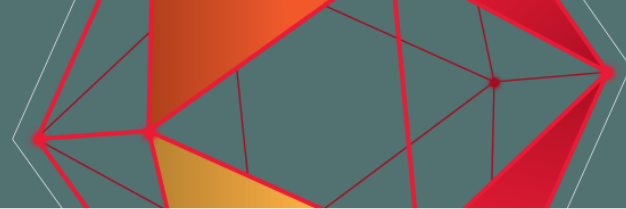


# EVERQUEST®



SONY ONLINE  
ENTERTAINMENT





# Coins, coins, coins

Let's Google "eq platinum for sale"

Then came Bitcoin, now we have crazy ICOs (initial coin offerings), \$250m\*

Much of it is hype

Money has value if people think it has value. What does this ticket admit you to?

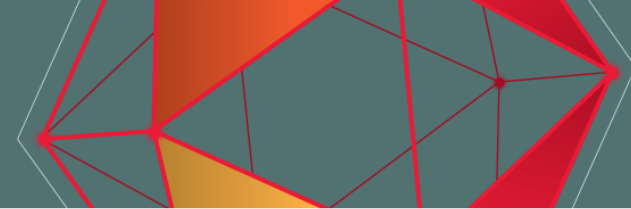
Political and social side of money not being addressed, money seen as a neutral agent whereas institutions of money are significant

In any case virtual money is a thing

[\\*http://www.businessinsider.com/the-10-biggest-ico-fundraises-of-2017-2017-12/#1-filecoin-257-million-11](http://www.businessinsider.com/the-10-biggest-ico-fundraises-of-2017-2017-12/#1-filecoin-257-million-11)







# What's the potential of...



## Imperial Coin

VS



## Useful Coin







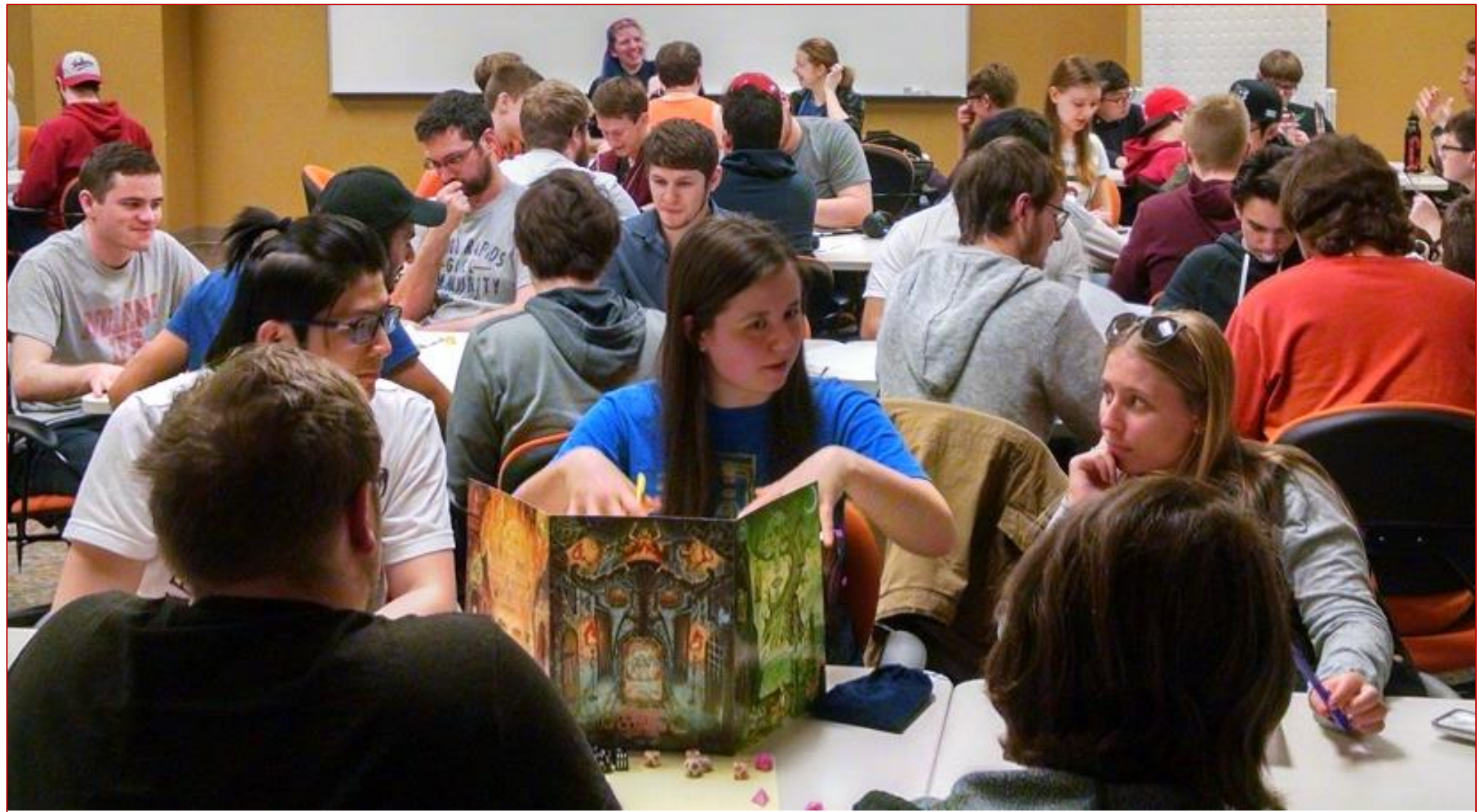
# Local coin in an academic program

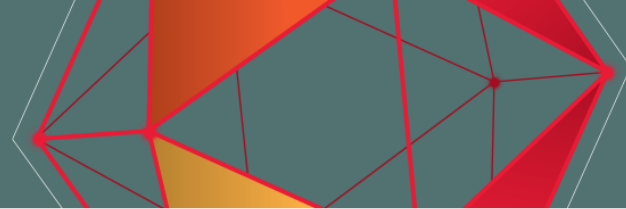
Indiana University

BS in Game Design

- Full undergraduate major

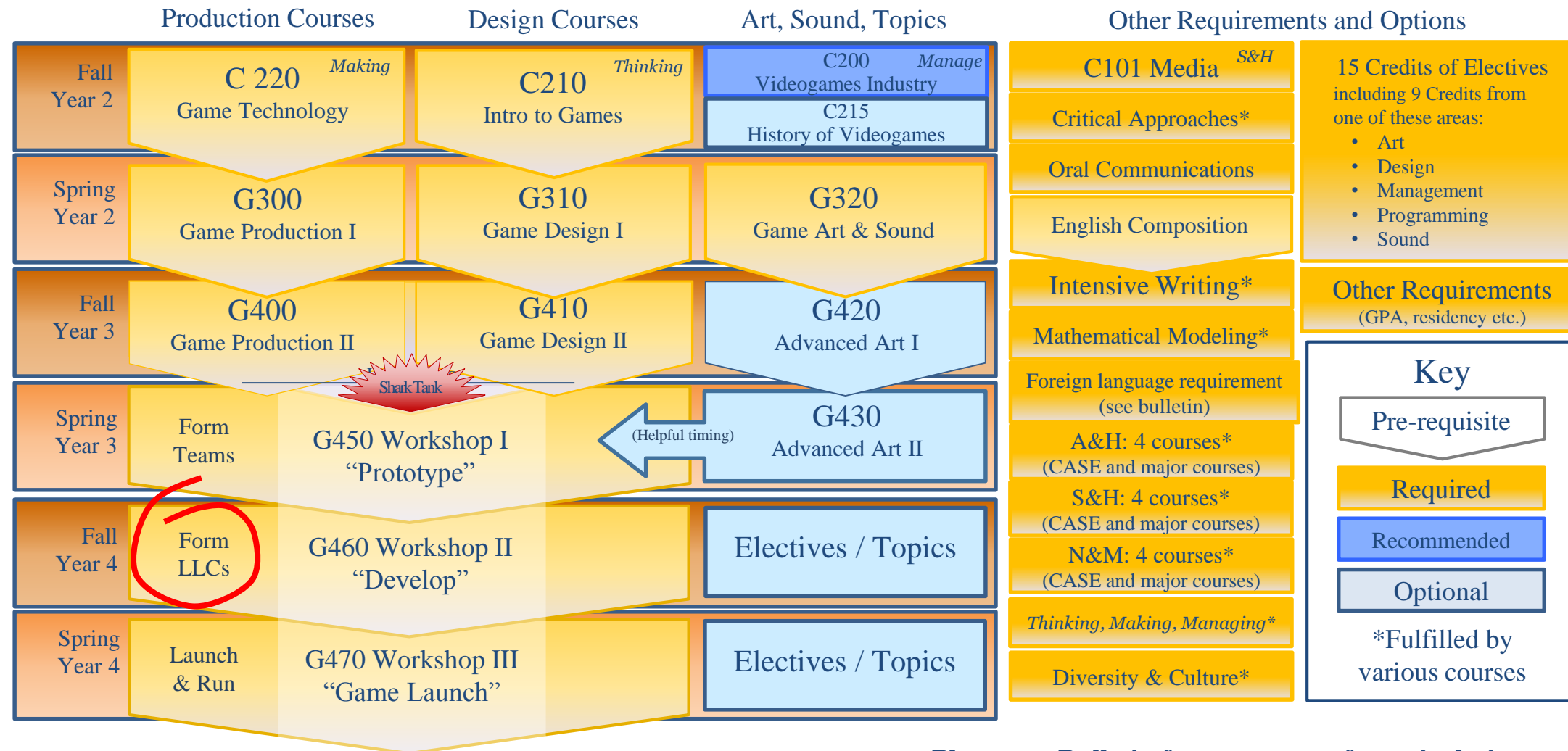
Launched 2015





## Indiana University B.S. in Game Design Course Map

As of March 2017



# Graduation

Please see Bulletin for your year of matriculation and MSCH Academic Advisors for additional details.





# Indiana's Game Design Approach

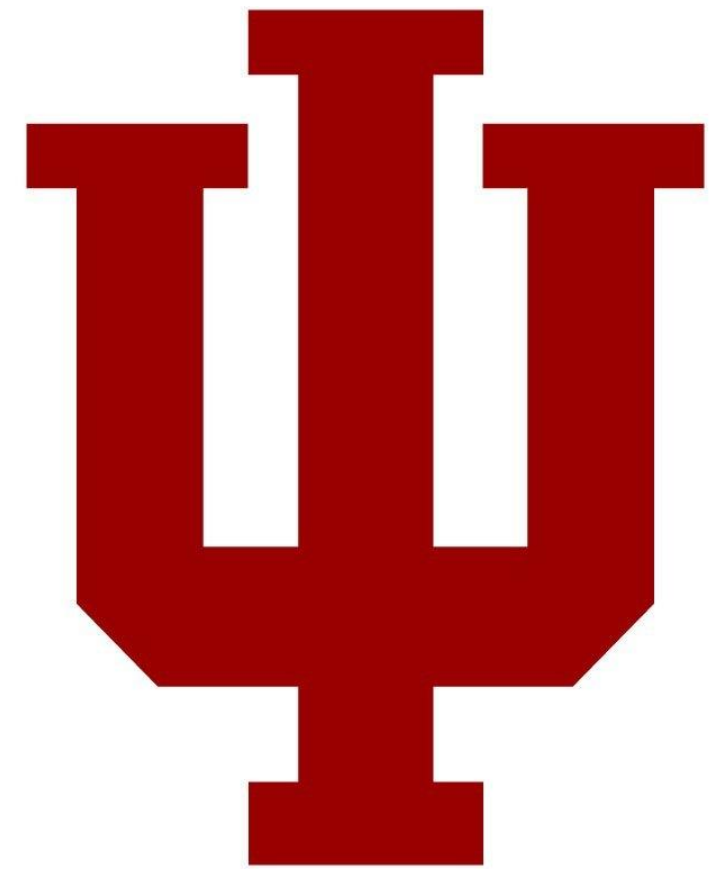
Work on 1 billion teams

Fail on (1b - 1) projects

Publish that one project for real

Be crunchy

Be community











# On Crunchiness

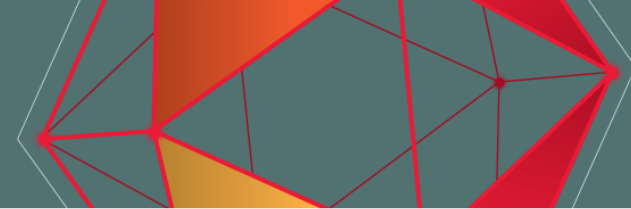
We teach games as systems: Parts / loops / wholes.

Every graduate knows enough programming, art, sound, production, and design to be dangerous in any of those areas

The design track emphasizes quant skills in a team setting: Excel, systems theory, game theory







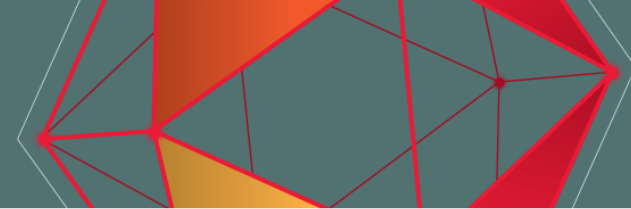
# Holy Scripture



## The Prophet Mike Sellers







# Games



Witch of the Woods (Wordpress)



Tori (Steam)



Slug Slasher (Steam)







# Feedback

Indie devs

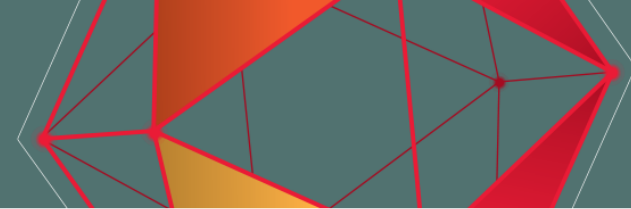
“Your students effectively have 1-3 years of industry experience” – senior producer\*

“Are you guys hiring?”

80% placement

\*Happy to tell you privately who it is





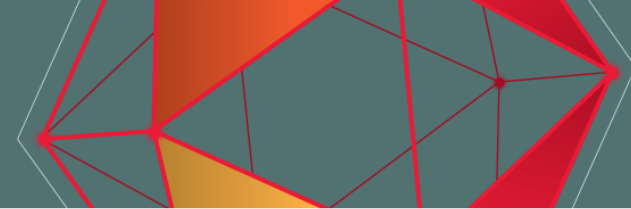
# Community

## Hoosier Games

- Student-run studio
- Incubator of lore-worthy scoping failures
- Invaluable learning site







# CEWiT

- Center of Excellence for Women in Technology
- Game Design SIG

Game Design  
Special Interest Group Presents

## Improving Team Communication Workshop



**Wednesday, February 21**

**7:00 - 8:00 PM** Franklin Hall, Room 310



**At this event, learn how to strengthen your communication skills on collaborative teams! We will:**

- Take a personality quiz
- Play games
- And learn to work effectively with others
- Refreshments provided

**RSVP:** <http://bit.ly/2EnCqdg>

**Facebook:** cewitWIGD

Sponsored By

**Ψ CEWiT**

Center of Excellence for Women in Technology



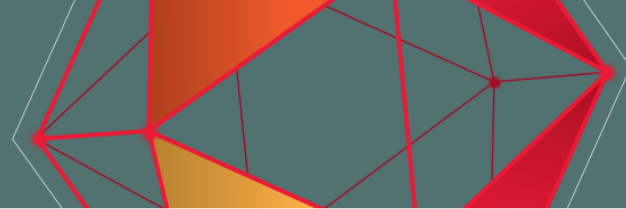


# Game Camp

- 2D
- 3D
- Code Camp
- Girl Powered!







Slack community

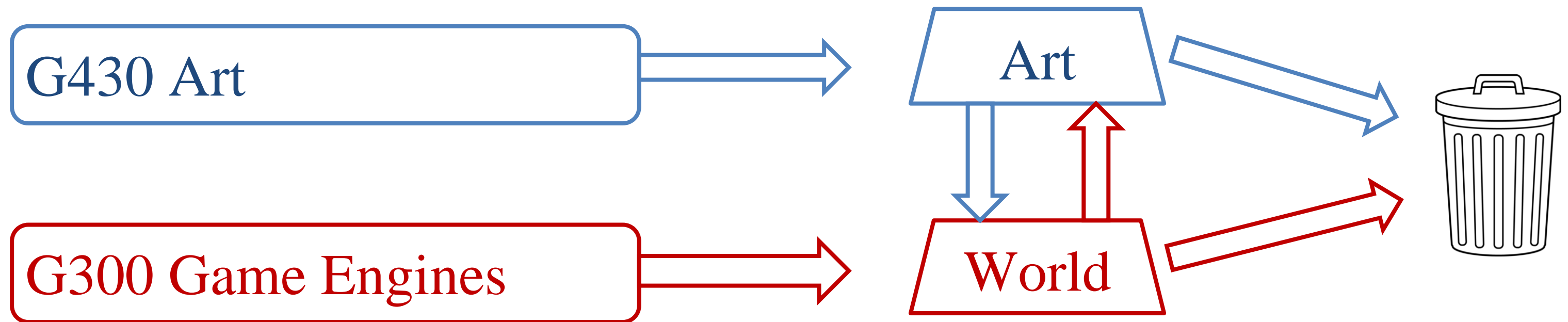


This is where the story of the Crimson begins

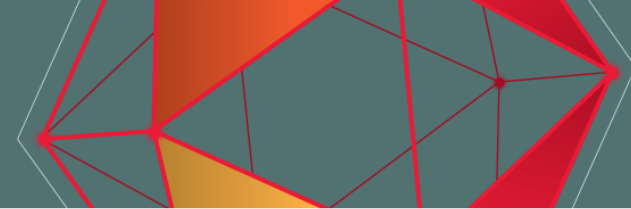




# The practical problem of collaboration across classes







# A virtual currency can

- Facilitate student exchange
- Let students practice outsourcing / freelancing
- Make community thicker
- Be a platform for fun





# The Crimson C



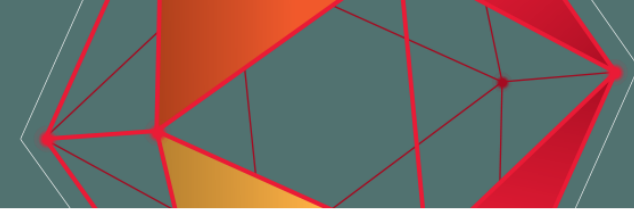
Soft launch in December 2016. Just started handing them out

Gradually developed policies for a year, let it evolve

1. How we did it
2. What happened







# Slack's API

## A brief tour

## Demonstration

- /tip
- Transactions

The screenshot shows a Slack interface for a channel named #general. On the left sidebar, the channel is listed under 'STARRED'. The main content area shows a message from Josh Centers at 11:07 AM sharing a link to 'https://sixcolors.com/link/2016/01/why-apple-defends-encryption/'. Below the link, the text reads: 'Six Colors Why Apple Defends Encryption Over at TidBITS, Rich Mogull offers a good overview of why Apple is taking a prominent role in arguing that encryption of user data is a good thing: Apple is nearly unique among technology leaders in that it's high profile, has revenue lines tha...'. Below this, a message from Mark H. Anbinder at 11:09 AM says 'Excellent.'.

Below the messages, there is a table with columns: Page, Source, Pageviews, Unique Pageviews, Avg. Time on Page, Bounce Rate, Source Rate, % Exit, and Page V. The table contains 10 rows of data.

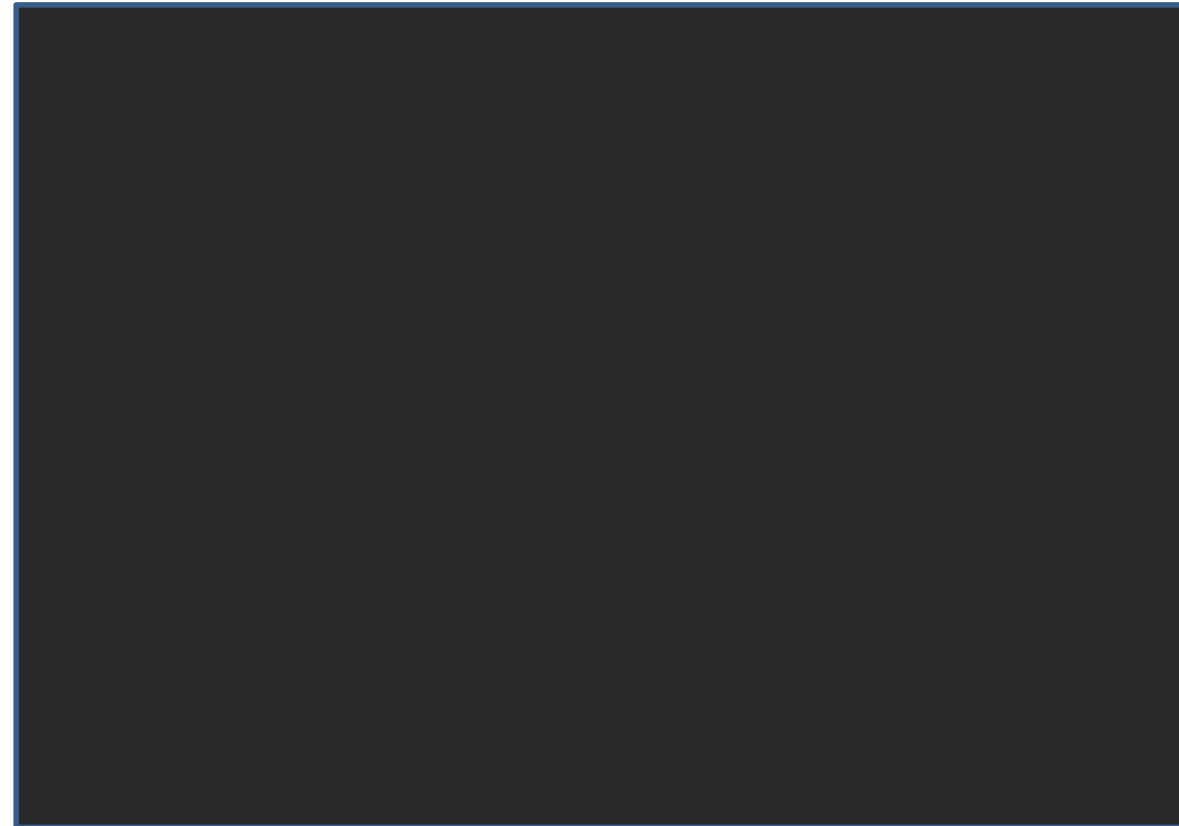
Page	Source	Pageviews	Unique Pageviews	Avg. Time on Page	Bounce Rate	Source Rate	% Exit	Page V
1	article10210	5,512	5,252	00:05:18	5,139	93.19%	92.42%	1
2	article10210	1,375	1,375	00:04:50	1,301	95.34%	92.30%	\$3.00
3	article10210	1,362	1,318	00:05:42	1,317	96.34%	91.75%	\$3.00
4	article10210	797	722	00:04:13	722	90.48%	85.76%	\$3.00
5	article10210	398	372	00:03:53	368	92.47%	91.36%	\$3.00
6	article10210	180	166	00:07:58	166	92.22%	92.00%	\$3.00
7	article10210	80	80	00:03:02	75	91.25%	93.33%	\$3.00
8	article10210	61	55	00:15:11	44	72.13%	99.04%	\$3.00
9	article10210	56	51	00:08:05	31	55.36%	95.11%	\$3.00
10	article10210	19	18	00:00:18	18	94.74%	94.74%	\$3.00
11	article10210	19	15	00:18:32	15	78.95%	93.75%	\$3.00





# TECHNICAL OVERVIEW OF SLACK VIRTUAL COIN SYSTEM

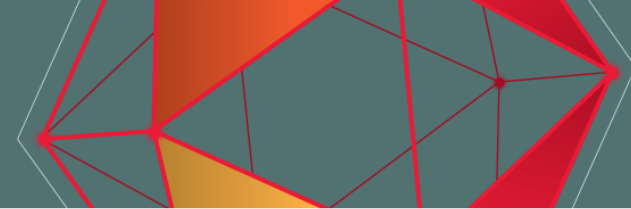
Slack  
commands →



└─→ Money in  
accounts is  
updated







Chabane Maidei\* created the Crimson, a virtual currency in Slack, in November 2016



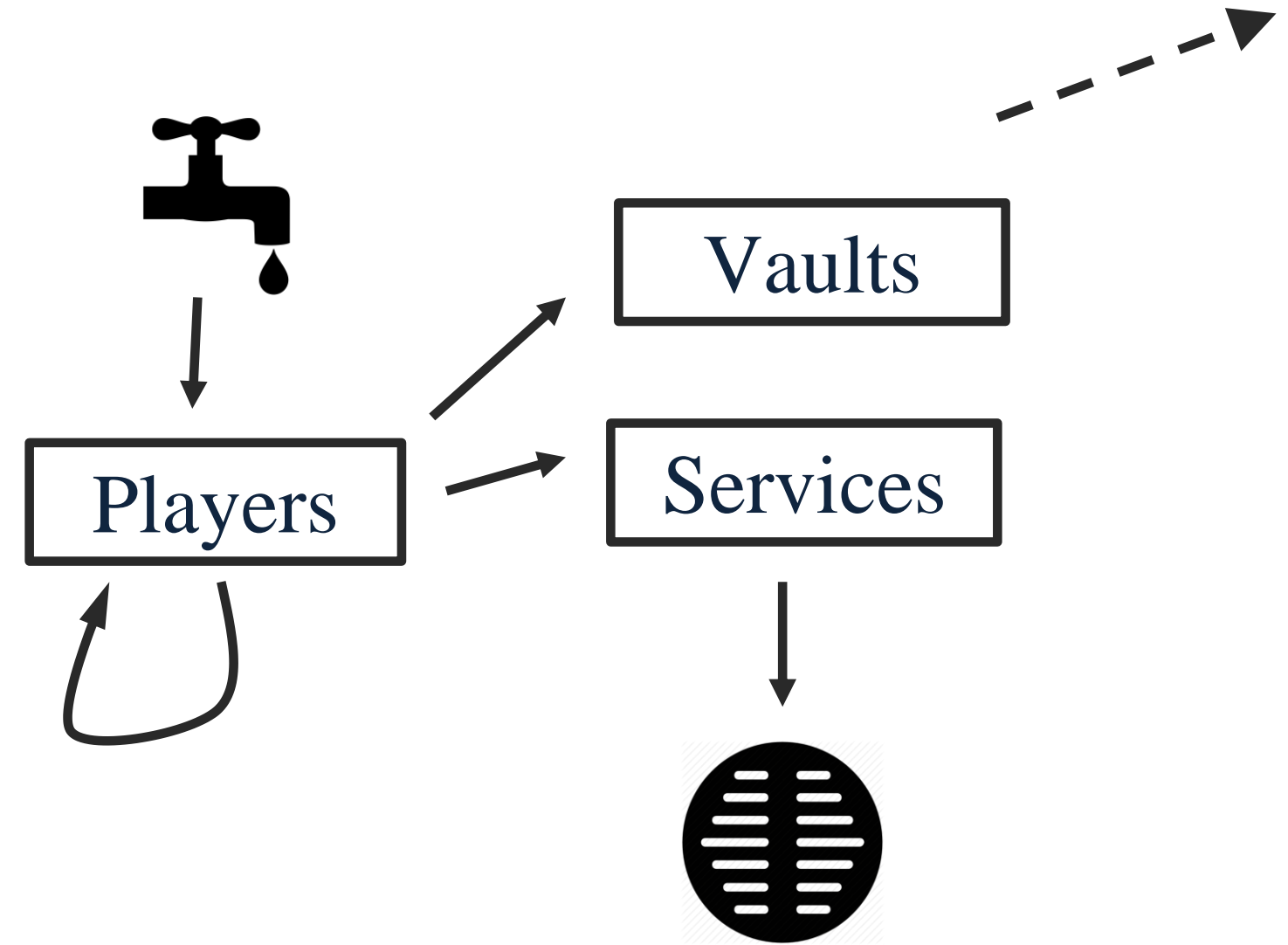
[cmaidei@indiana.edu](mailto:cmaidei@indiana.edu)

\*Pronounced sha-bahn' mah-ee'-dee





# Crimson money system design







## Faucets

- Tips for good answers in class, helping people, etc.
- Payment for jobs (give building tour)
- Hoosier Games Bank

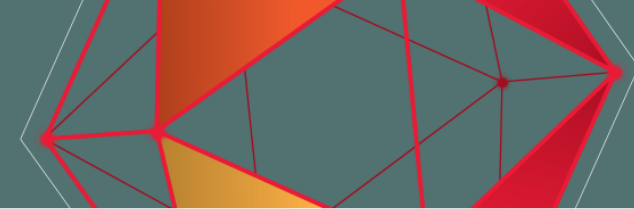
## Drains

- Assignment extensions
- Swag auctions
- Laptop Stickers

## Student to Student

- Hoosier Games work
- Asset work
- Clerical / PR
- Playtesting
- There's a grey area



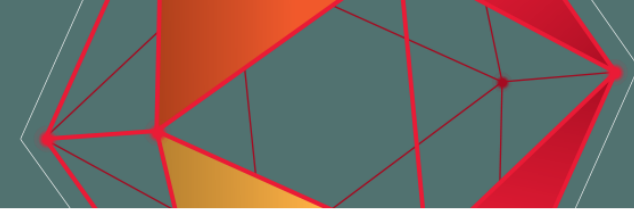


# Timeline Highlights

Date	Event
2017 Spring	
Jan 20	First sale. Unity hat for C22
Mar 24	First set of policies posted in #Auction
Mar 29	Dramatic appreciation: Tshirt sells for C2
Apr 10	Socks for C7
Apr 24	First S2S: Mentoring for a class
May 15	Graduating senior leaderboard. Highest: 109, lowest 0



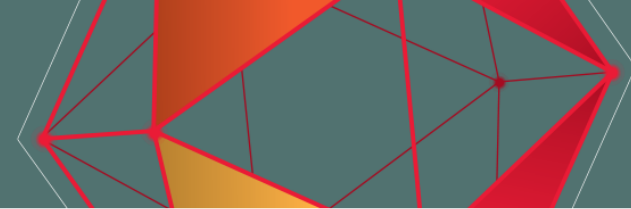




# Timeline Highlights

Date	Event
2017 Fall	
Summer	Student mines C all summer, gains over 200. Watching GDC videos, working for professor, students
Sept 6	Molag Bal sells for C70. Student looks up price on eBay (\$90) and broadcasts “real-world value” of C
Sep 8	S2S: soundscape for C50
Sep 9	Saga of the Blue Rope begins





# Mabyn and the Blue Rope

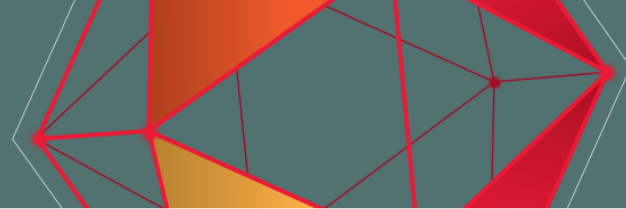
I posted this: “Quest. If you go room 030J and look out the North window, you will see a noble elm tree. Among its leaves there winds a blue rope, left by laborers. The rope saddens the wood-nymph who takes care of that grove, she has asked me to have it removed. I am anxious to retain the dryad's good will and fear misfortune should she become displeased. Therefore I will give C300 to the student who brings me that rope.”

3 minutes after posting this, a student was observed hauling a ladder down the stairs.

10 minutes after that, the rope was in my office and C150 given to two students.







# Later that day...

"Hello, would it be possible for me to attend the next game design faculty meeting to discuss the Crimson system? Obviously, I can't speak for all students, but I know that for some (myself included), recent transactions have been disheartening and confusing. I am working on a presentation to articulate the issues I see/have faced and offer potential solutions.

The main speaking point is in the value of the crimsons and a want for payment parameters that appropriately reflect behaviors that should be encouraged in the program."

Jon Brown, Executive Producer of Hoosier Games





# A policy discussion ensued

JB gave a powerpoint, with suggested price-points for faculty to follow.

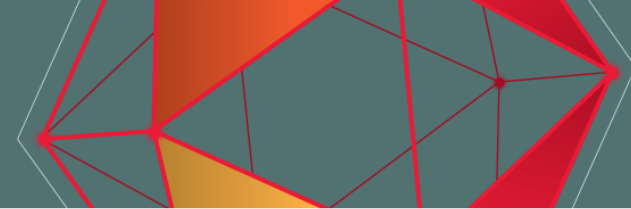
Three days later, a faculty meeting was devoted to the Crimson pricing system and basic regulations evolved

Formal regulations announced October 3 and went into effect November 1 2017 as the “Crimson Monetary Regulation Act.”

<https://docs.google.com/document/d/1NU6L-O3leqSq2amHDWYALXR2AYw-MRctw-D6lGhbgWk/edit>







# Example text

## 3. Money Supply

1. Faculty will make windfall distributions of ¤ to small number of student groups each year.
  1. Student leaders of Hoosier Games and Workshop 1 projects will create organization accounts on Slack.
  2. A lump sum of will be deposited into these accounts:
    1. On September 1 for HG: ¤2000
    2. On January 1 for W1 projects: ¤1000
2. Professors in Design and Production 2 may grant amounts of up to ¤100 to individual students to facilitate outsourcing.
3. Professors may issue small ad hoc amounts for program contributions, side quests and the like. These side issues should not exceed ¤5 per student.





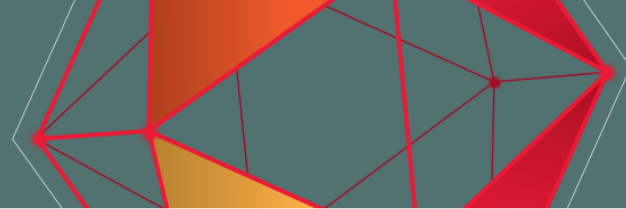
# Meanwhile...

The blue rope situation persisted.

- People took sides, Mabyn (the dryad) vs the “Cult of the Blue Rope”
  - There must be dwarves in the tunnels
  - Artwork and performance gets devoted to it
- 
- It turns out that a lot of the rope was still up there. The first students only got half of it.







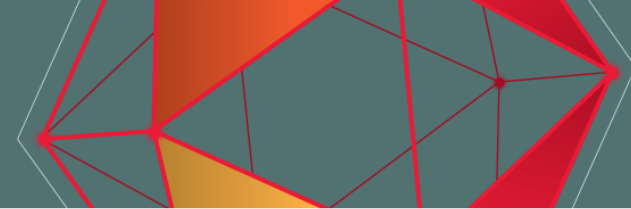
- Videos
- Interviews
- Rituals
- ARG

The weird thing: the rope disappeared after the last ritual and nobody claimed doing it.

Autumn Almeida







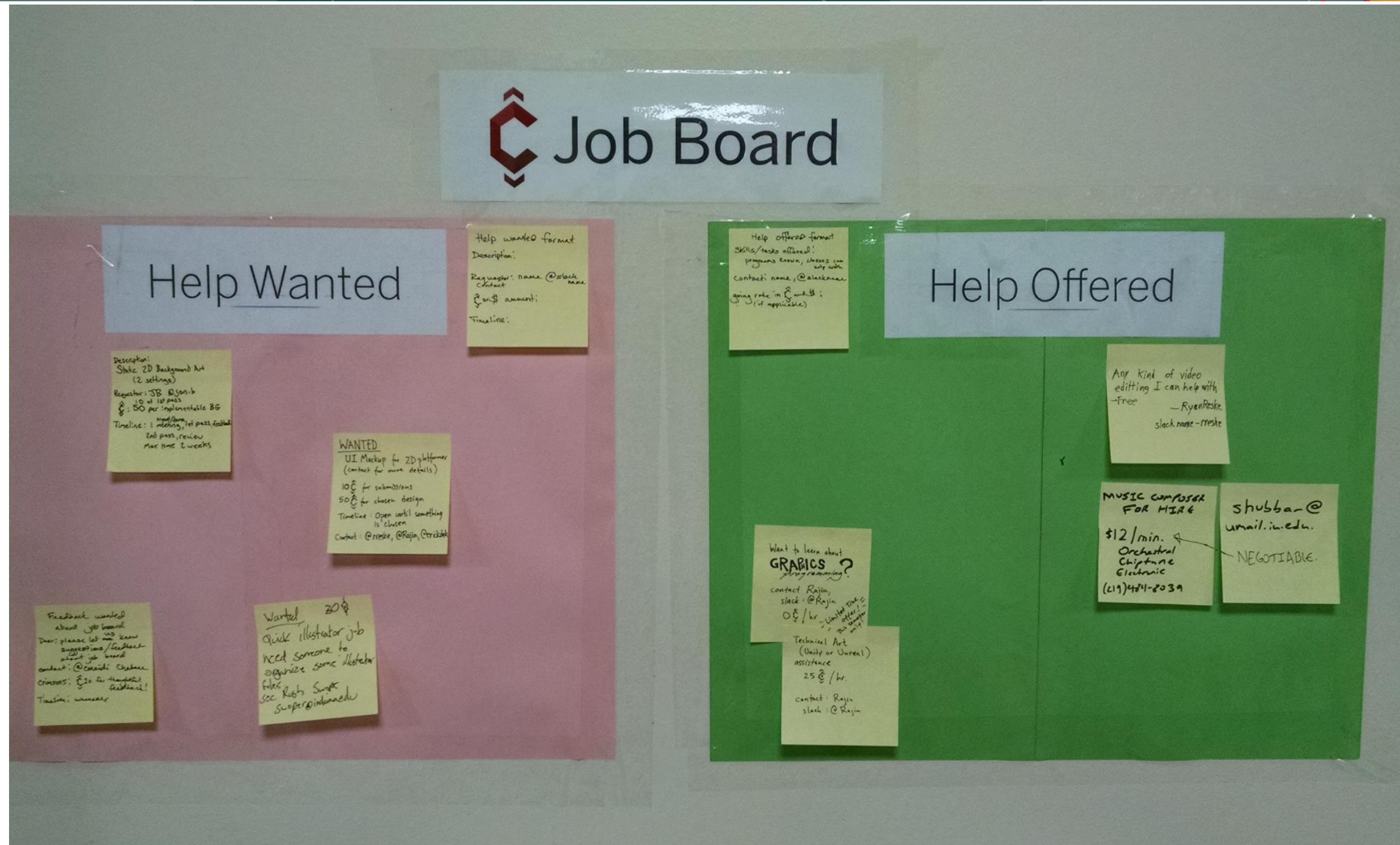
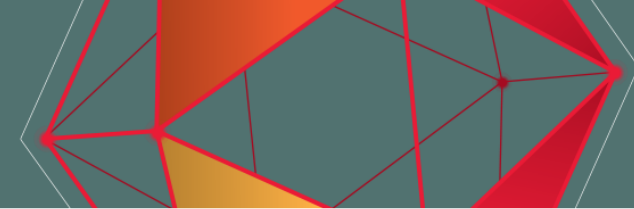
# Steady State

The system has settled down into the occasional auction and the occasional S2S exchange.

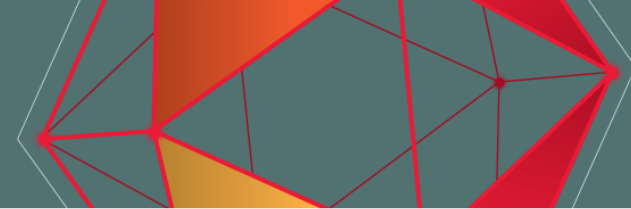
Most common faucet: Faculty giving C for specific class-related tasks

Most common drain: Students paying for extensions









Description:

Static 2D Background Art  
(2 settings)

Requestor: JB @jon.b

10 at 1st pass

⬆⬆: 50 per implementable BG

Timeline: 1 <sup>tryout/demo</sup> meeting, 1st pass, feedback

2nd pass, review

Max time 2 weeks

Want to learn about  
**GRAPHICS** ?  
*programming?*

contact Rajin,  
slack: @Rajin

0 ⬆ / hr - Limited time offer!  
this semester only!

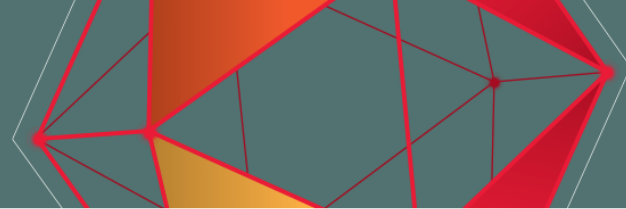
Technical Art  
(Unity or Unreal)  
assistance

25 ⬆ / hr.

contact: Rajin  
slack: @Rajin







# Innovations

## Hoosier Games uses Crimsons to motivate work

<https://docs.google.com/spreadsheets/d/1cZi-SkF64rzXSZGMedfMbp56Sc9rb26R-V6ljXFkSwI/edit?ts=5a73ab80#gid=0>

### Romeo and Juliet

- R2J: C30 cutie ;)
- J2R: C1 A PENALTY FOR BEING TOO CUTE
- R2J: C1 Cuteoclastic!

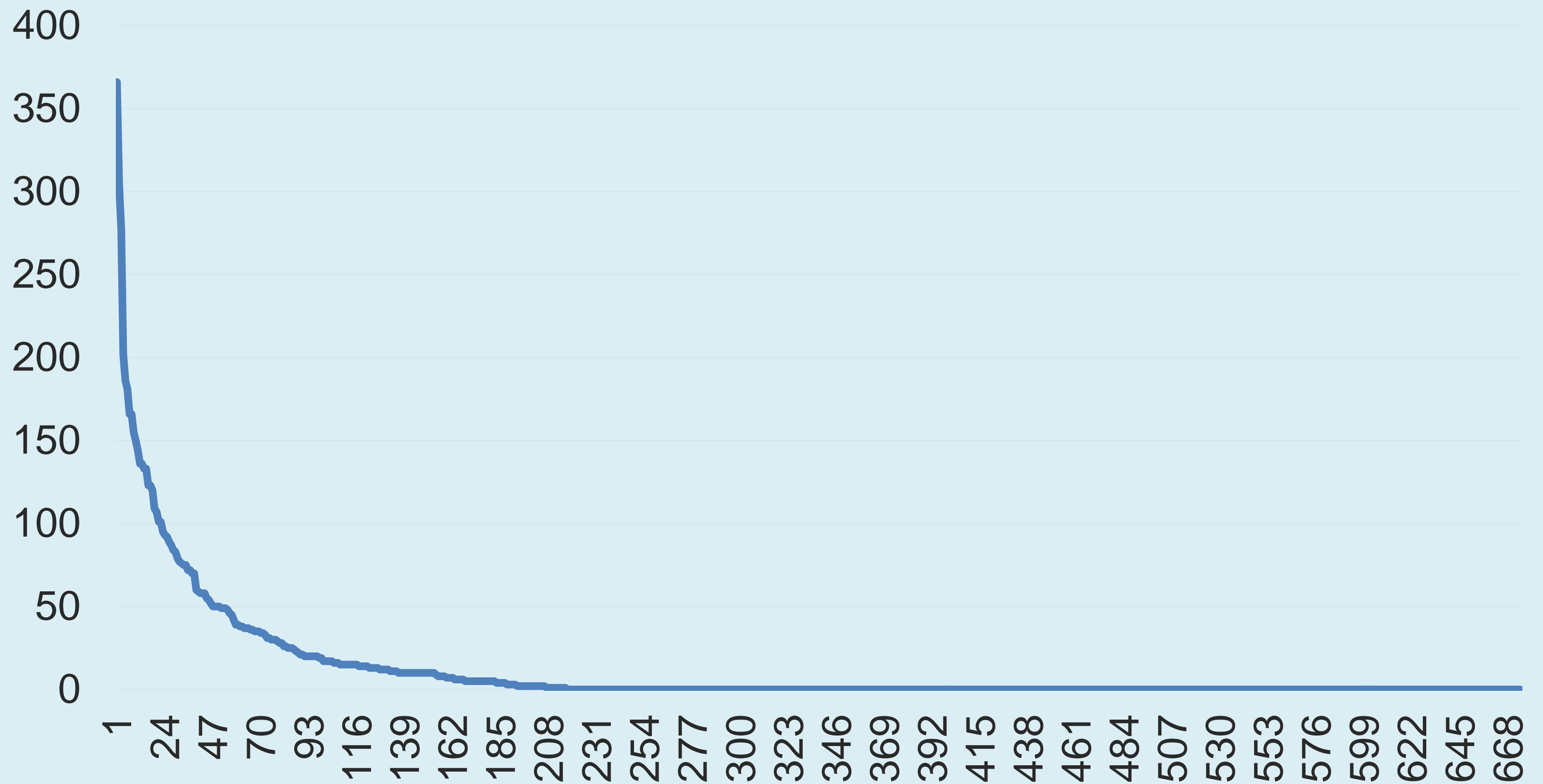
Auction types: silent, “flurry” etc.

Charity (A gives B C10 for an extension)

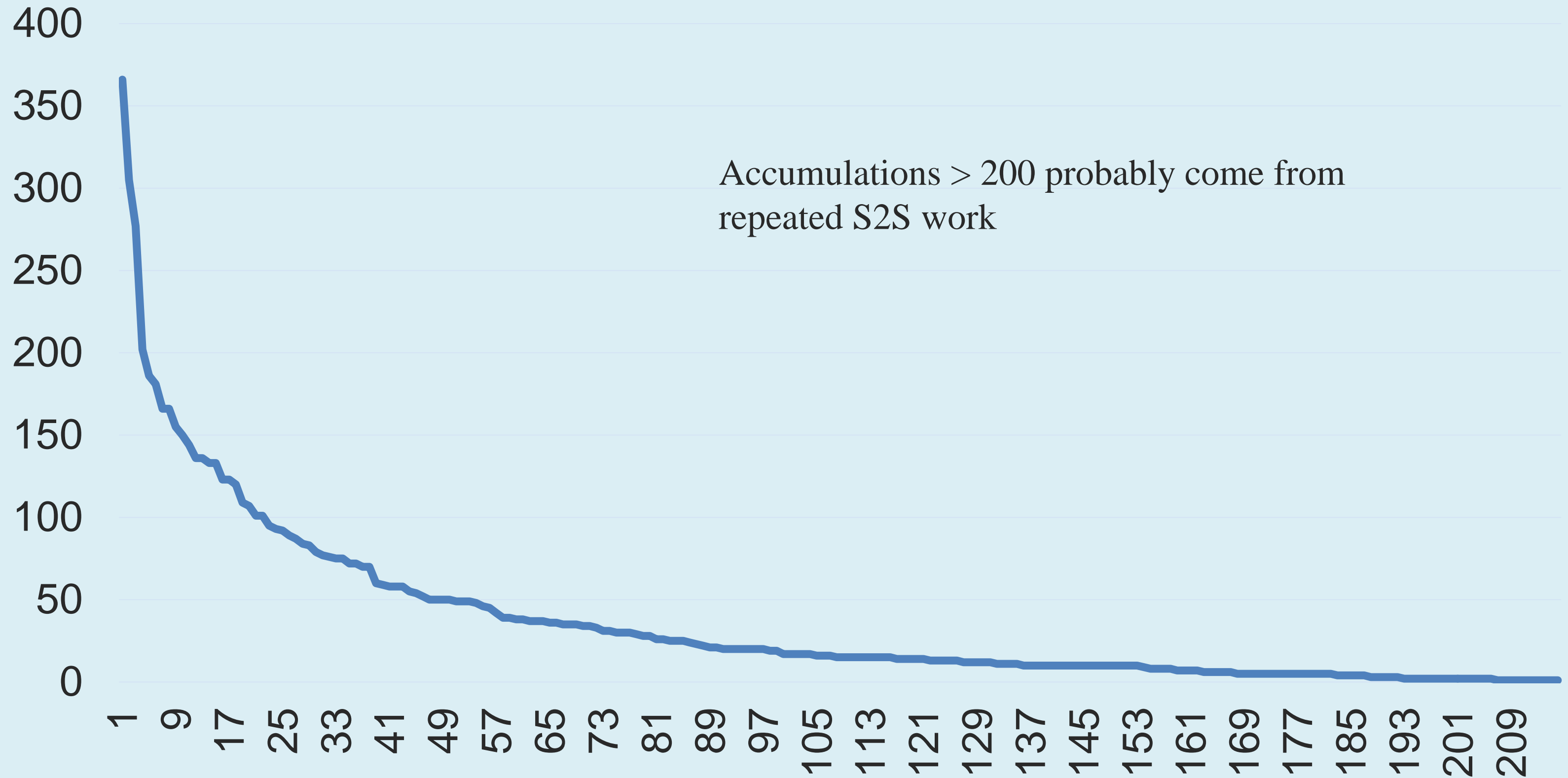
Politics: Faculty gives C5 to male students who attended a CEWiT event



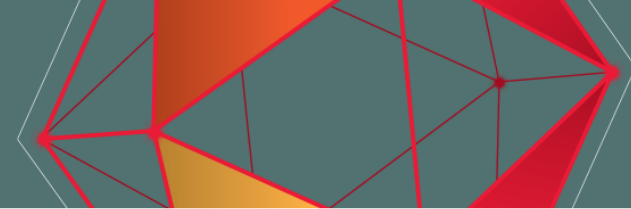
# Crimson Distribution Feb 2018



# Crimson Distribution no 0s





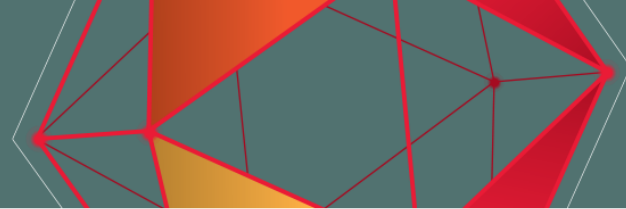


# Matters for concern?

So, I need to get a ride home this Thursday sometime around 2:30pm. I'm willing to offer C10-15 and/or whatever dessert I happen to have around my house at the time (currently looks like chocolate chip cookies)

Rumor: \$10 for C13 for an extension

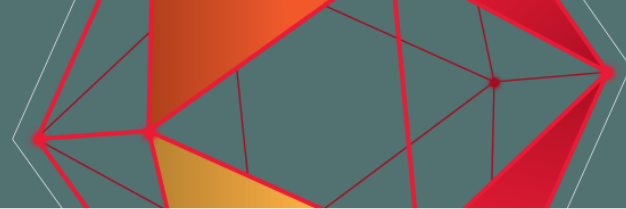




# Takeaways

- The Crimson is at least a harmless and fun community builder
- There is a S2S market
- Don't let faculty go rogue
- Needs a steady stream of faculty-driven activity (payouts and auctions)
- Money is socio-political, not just technical
- Think more about small money





# Questions?

Edward Castronova

Indiana University

BS in Game Design

<http://mediaschool.indiana.edu/gamedesign/>

castro@indiana.edu

@Castronova\_E

edwardcastronova.com

