

Strange Loop 2019

A very brief round-up

<https://www.thestrangeloop.com>

[https://www.youtube.com/channel/
UC_QIfHvN9auy2CoOdSfMWDw](https://www.youtube.com/channel/UC_QIfHvN9auy2CoOdSfMWDw)

Over 80 talks in 2 days...

- **How not to read the room: creating wearables with ML (Stephanie Nemeth)**
- **Declarative APIs in an imperative world (Tilde Thurium)**
- **Assistive augmentation: Lip reading with AI (Serg Masis)**
- **How computers misunderstand the world (Meredith Broussard)**
- **How we tell stories in code (Hannah Howard)**
- **Probabilistic scripts for automating common-sense tasks (Alexander Lew)**
- **CSS Algorithms (Lara Schenck)**
- **Community Driven Development (Christine Zagrobelny)**
- **Closing Keynote performance (Imogen Heap)**

How to teach programming (and other things)

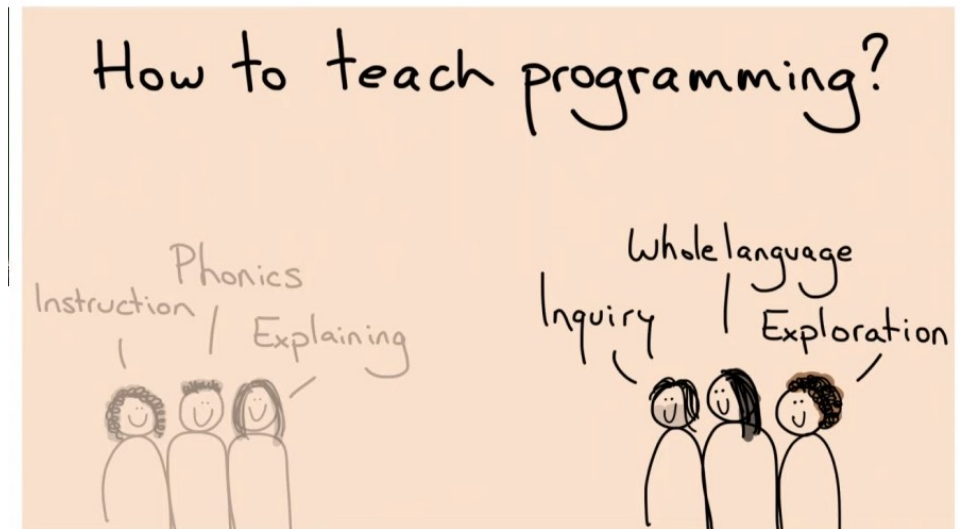
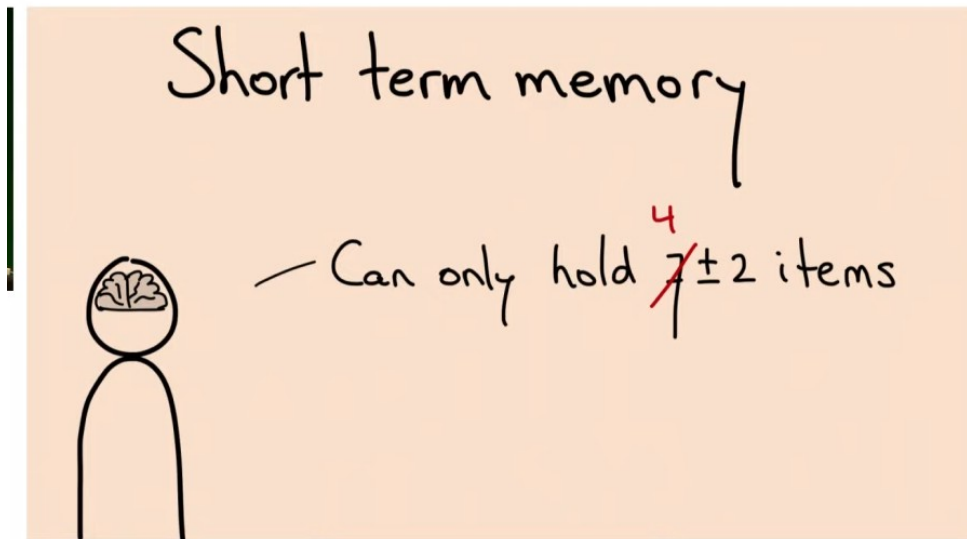
Felienne Hermans

2 theories of learning.

Coding is not fun.

In order to reason/ problem solve, we need chunks to reason with.

Read code & provide explanation. Don't learn by writing code.

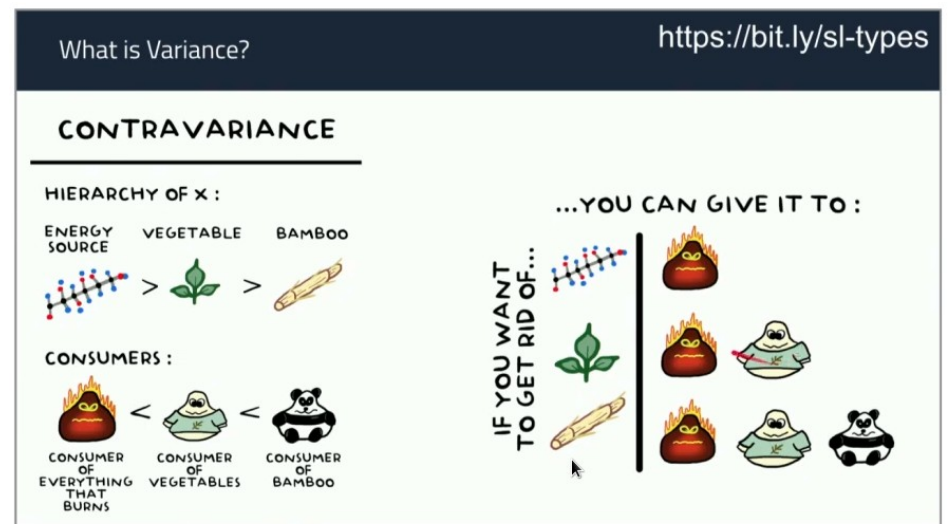
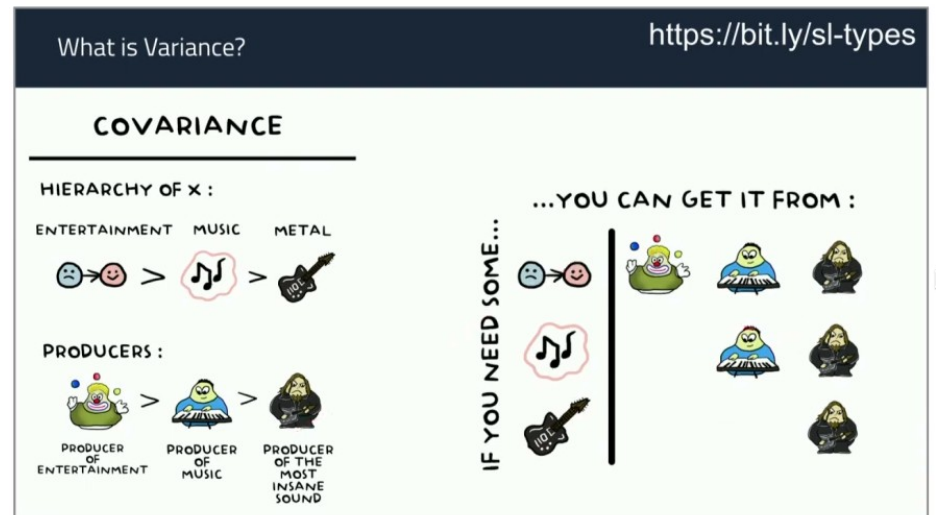
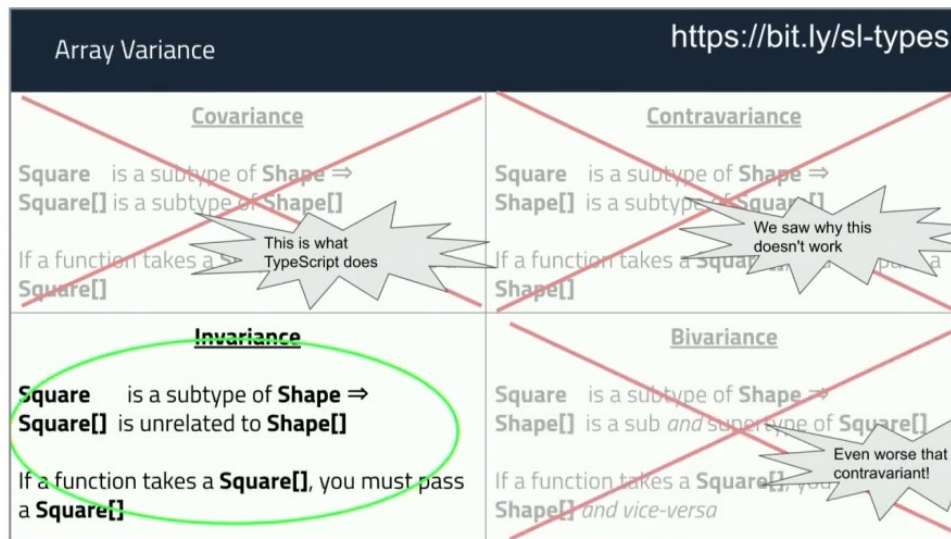


Typing the Untyped: Soundness in gradual type systems

Ben Weissman

Soundness – No code with type errors
Completeness – No false reports

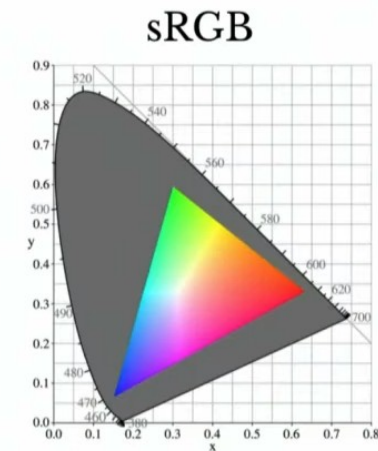
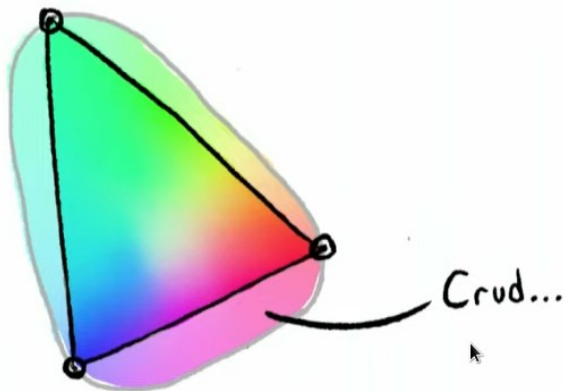
Gradual systems also need to work with existing code / idioms



RGB to XYZ: The Science and History of Colour

John Austin

1931 CIE colour resolutions
John Guild Early
sRGB then CIE-XYZ



ASTRIAGraph: Monitoring Global Traffic in Space!

Moriba Jah

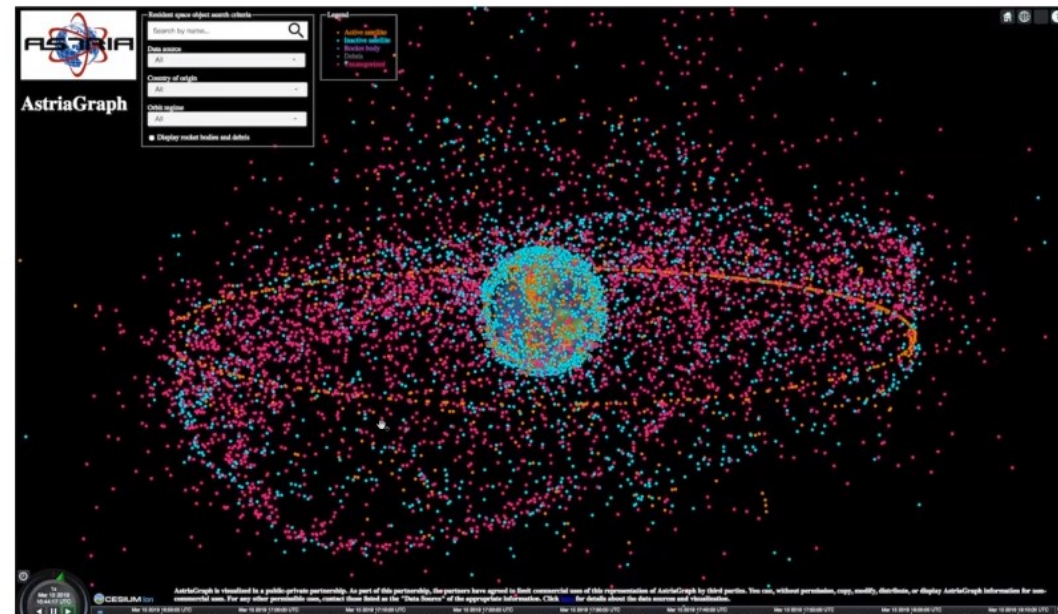
26000 objects tracked but there are 1/2 million and only 2500 of them work Global internet. 10-15K in next 5 years.

Orange dots work. Pink trails are objects that exploded in last 12 months

Planned US Sources to the Space Object Population

Constellation name	number of satellites	Altitude (km)	Launch year (start)	Owner
Starlink Phase A	1584	550	2019	SpaceX
Starlink Phase B1	1600	1110	2020	SpaceX
Starlink Phase B2	400	1130	2023	SpaceX
Starlink Phase B3	375	1275	2024	SpaceX
Starlink Phase B4	450	1325	2024	SpaceX
OneWeb	648	1200	2019	OneWeb
Telesat 45° inclination	150	1000	2021	Telesat
Telesat 98° inclination	150	1150	2022	Telesat
Kuiper Phase 1	1156	630	2022	Blue Origin
Kuiper Phase 2	1296	610	2023	Blue Origin
Kuiper Phase 3	784	590	2024	Blue Origin
Total	8593			

bit.ly/astrigraph



Watch the Watcher: Facial recognition & police oversight

Eileen McFarland

Fewer than 2% of misconduct complaints lead to any sort of discipline
Facial recognition lacks regulation (city by city, state, country own or no rules)
Facial cognition doesn't work for marginalised groups
Is the tech working & what is it working for?



I was sorry to miss:

Recreating forgotten programming languages for art (Sher Minn Chong)

A Robot Goes for a Walk in the Park (Em Lazer-Walker)

Digital and Social Resilience through NYC Mesh (Michael Donatz, Jilian Murphy)

How to build with data trust and privacy as a baseline (Noble Ackerson)

The strange loop making parasitic insects our friends (Mary Marek-Spartz)

Uptime 15,364 days - The computers of Voyager (Aaron Cummings)

Beyond Alt-text: Trends in Online Accessibility (Ian Forrest)

Can Androids Conceieve of Electric Sheep (Kwame Thomison)

Other cool things

City museum

Taste of St. Louis festival

No hand guns allowed

Elm

Conversations

Project Alloy

Board games

Learning the cup song