## Whysaurus

Jordan was better than LeBron.
Pineapple on pizza is good.
Aliens are real.



## This talk

- 1. Who we are
- 2. What is Whysaurus?
- 3. How we can help your team



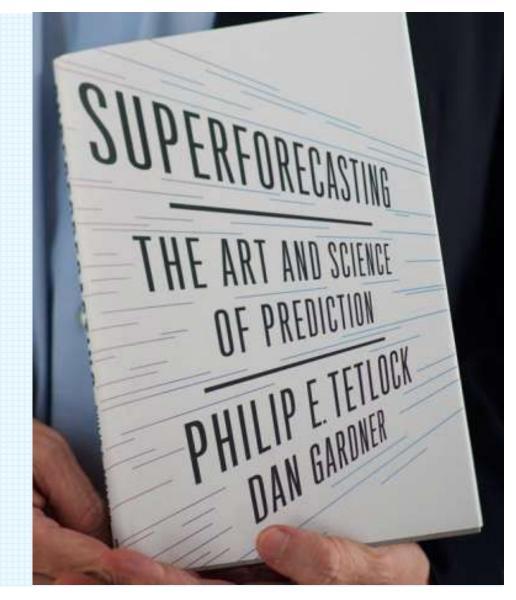
## Who we are



#### **Joshua Frankel**

#### About me

- Superforecaster (I'm in the book :)
- Creative Strategist, designer and artist
- 20 years experience working in advertising



#### **Joshua Frankel**

#### Recent experience for IARPA CREATE—

#### **Recruitment Campaign of study participants**

- Developed Creative strategy and designed online ads
- Highlights—
  - Multiple creative campaigns running on Facebook, Instagram, Twitter and Quora
  - Impressions +8MM
  - Reach 2.8MM
  - Email Registrations 9,063
- In collaboration Gravy Boat Regatta, a boutique advertising agency; sub-contracted to Good Judgment, Inc





### **Whysaurus Collaborator #2**

#### Relevant experience

- Artificial Intelligence researcher and tech lead at Facebook AI Research (FAIR) focused on multimodal ML
- Previously, a quantitative portfolio manager at a well-respected hedge fund
- Degrees in computer science and philosophy





## What is Whysaurus?



## **Argument Is How We Make Progress**





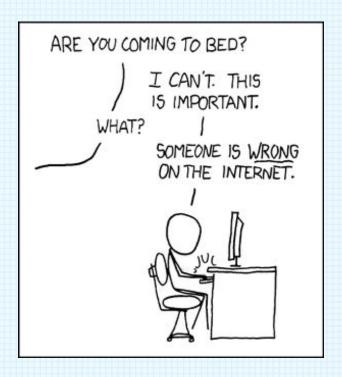
## **Argument is Broken**







# Whysaurus is a platform for collaborative argument creation and evaluation





### **Collecting The Best Evidence-Based Arguments**



#### The best arguments for everything at your fingertips

Just the key points. No filler. Each point is bite-sized, rated and filtered.



#### Click "See Evidence" on any claim.

If there's no evidence, see that upfront.



#### Collaborate.

Diverse perspectives make arguments richer.

The best contributions rise to the top.



#### **Current Features—Live Now!**



- Collaborative—robust concurrency handling
- Make Claims with character limits
- Support or counter claims with other claims—into infinity!
- "See Evidence" button
- Rate claims with "agree" and "disagree"
- Rate links with relevance %
- Flag "Needs Evidence" or "Needs Clarification"
- Comment on claims and links
- Bayesian Argument scores
- Re-use claims to make new arguments quickly
- Version history tracking

@BillSimmons and 3 others LeBron is better than Jordan was. +56 Hide Evidence · Agree Disagree 100% @MikeFrancesca and 12 others The level of talent NBA has risen, so LeBron plays against stiffer competition. +24 See Evidence · Agree Disagree · Relevance 88% @Bullsfan23 and 3 others Jordan's stats are extra-impressive because he left the NBA in his prime to play baseball +36 Hide Evidence · Agree Disagree · Relevance 100% @loevFromOueens and 12 others

returned when he was 33. +21

Jordan left the NBA when he was 31 years old and

### **Project Background**

- Intuitive, humane UX first. We believe structured argument is a UX problem that requires higher standards for design and UX than most other digital projects—and have made that our priority.
- UX built in React/GraphQL
- 14,000+ unique users to date with robust concurrency handling and scalable architecture
- Trials with The College Board, UC Berkeley, and the Superforecasters
- ~10 Years of research, experimentation insight and iteration
- Work-in-progress (you might find bugs!)



## How we can help your team

Here's one idea...

(And we're very open to your ideas too!)



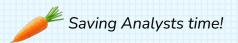
# Whysaurus as a Constrained Platform for Al-Assisted Reasoning

Could AI assist analysts with reasoning more successfully if we constrain that work to a structured argument outline rather than the "wide-open" space of prose?

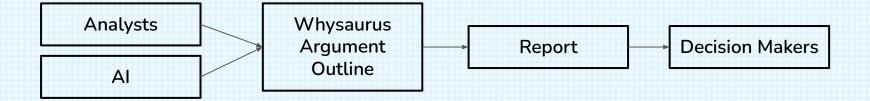


#### What might a prototype for AI-assisted structured argument look like?

- Analysts start an argument outline in Whysaurus with a few claims
- Analysts click "Find Evidence" on selected claims
  - Al proposes some supporting- and counter-claims (Task Area 1)
- Analysts share the Whysaurus argument with peers and supervisors, who comment, flag claims that need evidence and clarifications, etc
  - Analyst and AI collaborate to revise and strengthen the outline
- Analyst clicks "Draft Report"
  - Al composes first draft of prose report based on the outline.
  - Analyst refines the draft









#### First AI tasks are achievable, and deliver value immediately

- Assemble lists of evidence
- Generate first draft of prose report based on argument outline

#### The process degrades gracefully

- If the AI fails at one task, the system still works
- Each task is clearly defined—so if an AI prototype delivers an unsatisfactory output the analyst can complete that task manually.



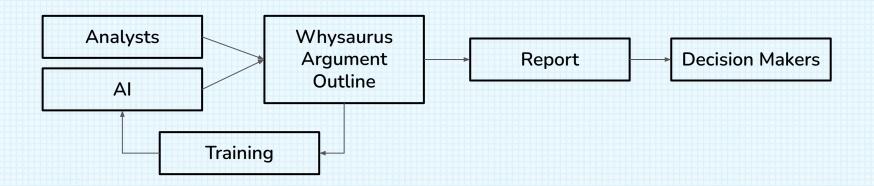
Task Areas 2 & 3—working in the argument outline <u>focuses</u> Al tasks, increasing the likelihood of success

- Evaluate Reasoning (Task Area 2)—
  - Rate claim validity
  - Rate relevance of links between claims
  - Rate argument outline as a whole
- Produce Comments (Task Area 3)
  - Comment on claims
    - "Needs Clarification", "Needs Evidence" and why
    - Suggest other ways to frame a claim or argument
  - Comment on links
    - "This claim is/isn't relevant because \_\_\_\_\_"
  - Comment on argument as a whole
    - "A more valuable way to frame this argument might be \_\_\_\_\_"



#### Long-term (Post-REASON)—a virtuous cycle of improvement

- Al improves rapidly because it can learn from data that's already structured, tagged, and directly related to what we are asking it to do.
- Analysts make more strong arguments better and faster





# Whysaurus as a Constrained Platform for Al-Assisted Reasoning

## Is an AI assistant what argument-mapping always needed?

- Many argument mapping projects have failed because argument-mapping is laborious
- Al can solve this by serving as a virtual assistant, unlocking the potential of this form





## Thank you

Try it out <a href="http://whysaurus.com">http://whysaurus.com</a>

Get in touch joshua@whysaurus.com



## **Appendix**

## **Argument Is How We Make Progress**

FREDERICK DOUGLASS, ABOLITIONIST JANE JACOBS, AUTHOR, ACTIVIST SONYA SOTOMAYOR, SUPREME COURT JUSTICE

TENZIN GYATSO, DALAI LAMA MARTIN LUTHER KING, JR., MINISTER, ACTIVIST TAWAKKOL KARMAN, JOURNALIST, ACTIVIST

EMMA GOLDMAN ACTIVIST JOVITA IDAR JOURNALIST CHIEN-SHIUNG WU NUCLEAR PHYSICIST ABRAHAM LINCOLN, US PRESIDENT ALBERT EINSTEIN, PHYSICIST

CESAR CHAVEZ, LABOR LEADER MAYA LIN, ARCHITECT, ARTIST

NELSON MANDELA, REVOLUTIONARY GALILEO, ASTRONOMER MUHAMMED YUNUS, ECONOMIST

RACHEL CARSON, BIOLOGIST

ALEXANDER HAMILTON, STATESMAN IDA B. WELLS, JOURNALIST

