

duckcon #5

outliers are all you need

- reducing the asymmetry of information in capital allocation in health and the built environment

to meet the market demand for liquidity in consumer and enterprise health

contact: jaan@onefact.org

slides: talk.onefact.org

audio: [dropbox](#) + [suggested backing](#)

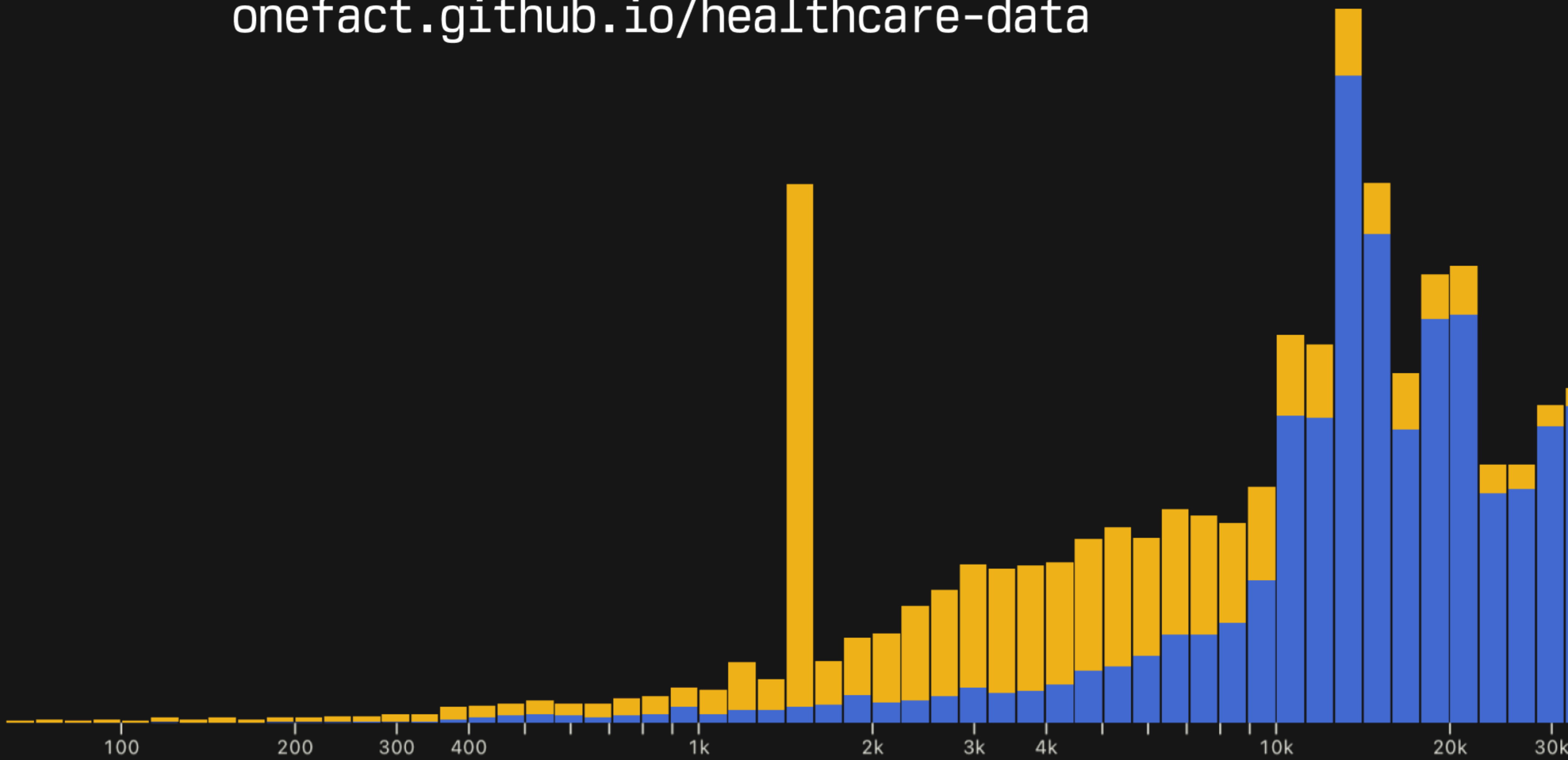
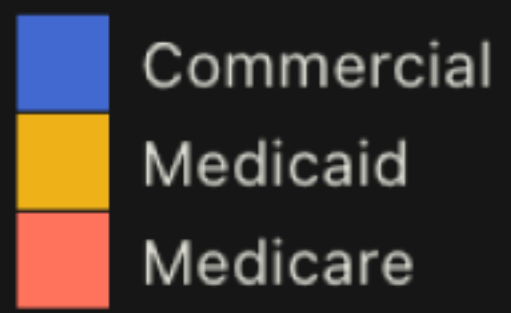


built environment

onefact.github.io/new-york-real-estate/

health

onefact.github.io/healthcare-data



collective intelligence

results in the most accurate
differential diagnosis

- with which model?
- is it accessible to low- and middle-income country clinicians and patients?
- how do we deploy it and run inference at-cost? how do we comply with hipaa?
- metric: quality-adjusted life years per floating point operations per second

growth strategy

malawi: 2 residents

trained with childfx.com (<https://link.springer.com/article/10.1007/s00247-023-05754-y>)

recent paper showing it improves detection:
<https://link.springer.com/article/10.1007/s00256-024-04698-0>

radiology is easiest, then clinical notes have a 5-10 year time horizon for financial return, priced at-cost via our 501(c)(3) non-profit for providing services. full deck of strategy.

technology convergence

transformer like
clinicalbert (or vision
transformer)

+ credentialed humans
(md, phd, bsc, # years
training, np, doula, etc)

+ labelstud.io

linkedin link


PREMIUM



Laura Heacock, MD, FSBI
Associate Professor at NYU
Langone Health


✓ Following

View full profile

 **Laura Heacock, MD, FSBI** · 2nd
Associate Professor at NYU Langone Health
1mo · 🌐

This pathology multimodal genAI model has an interpretable chatbot component. Similar to ongoing radiology work at [NYU Imaging/ Radiology](#), this is absolutely where the medical imaging field is heading.

📖 worth a read as all medical imaging modalities are gradually converging on similar technology.

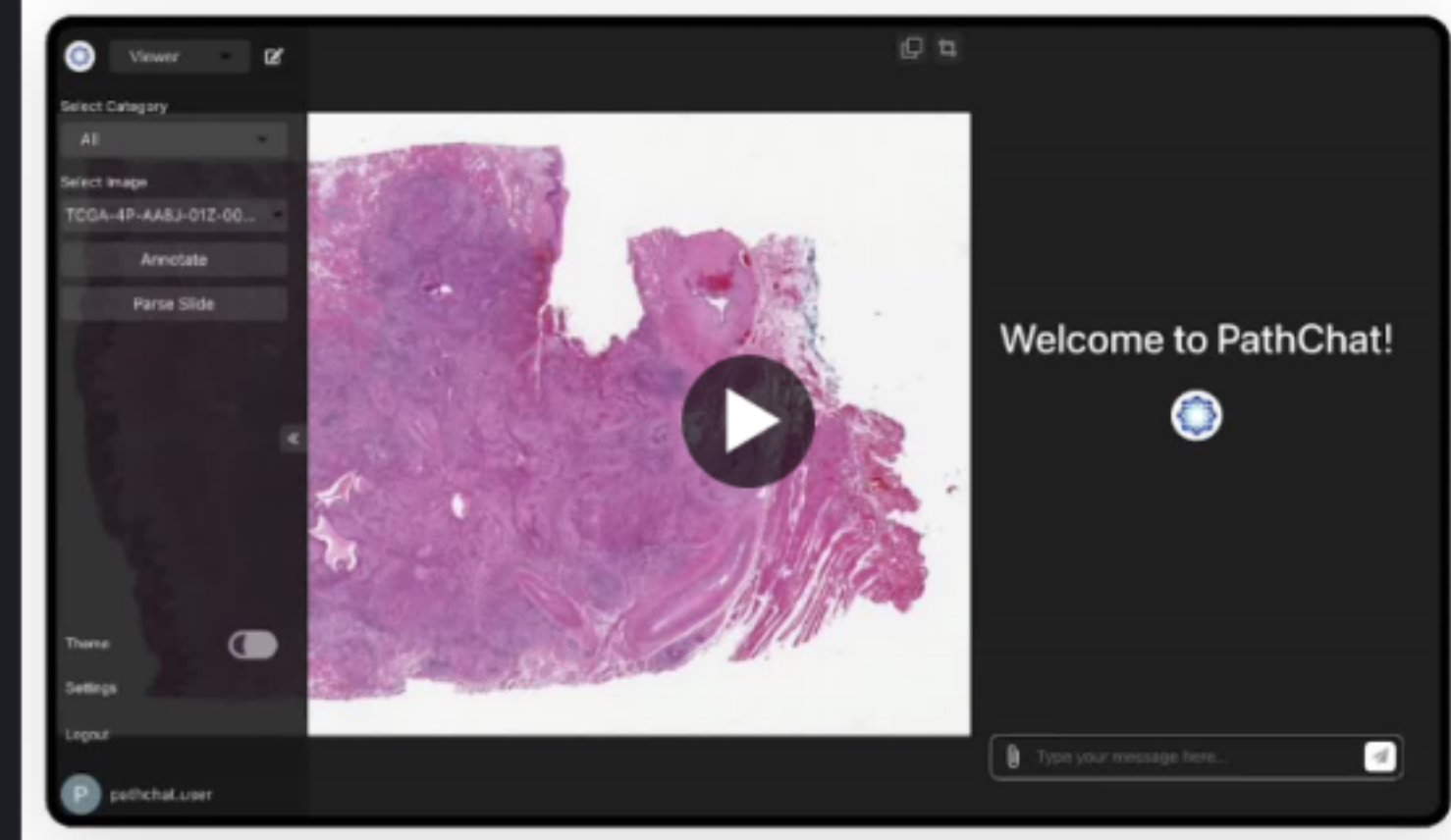
 **Faisal Mahmood** · 2nd
Associate Professor, Harvard & MGB - AI for Health
1mo · 🌐

⚡📖👉 Excited to share our new Nature article building and evaluating PathChat, a multimodal generative AI copilot and chatbot for human pathology. Article: <https://lnkd.in/epAYukDj>

We leverage our previous success in building foundation models for computational pathology such as UNI / CONCH and combine it with the advancements of large vision language models and generative AI to enable PathChat to answer diverse pathology-related queries. We assessed PathChat using both multiple choice diagnostic questions and open-ended questions.

Congratulations to [Ming Yang \(Max\) Lu Bowen Chen Drew Williamson Richard J. Chen](#) and everyone else who contributed to this work.

Also see blog post from [Ming Yang \(Max\) Lu](#) about this work: https://lnkd.in/eBxi_sWT, also teasing the development and preview of PathChat 2, a successor to PathChat 1 bringing new capabilities and substantially improved performance to the state-of-the-art.



The screenshot shows the PathChat interface. On the left, there's a sidebar with options: 'Select Category' (set to 'All'), 'Select Image' (set to 'TCGA-4P-KASJ-01Z-00...'), 'Annotate', and 'Parse Slide'. Below that are 'Theme' and 'Settings' sections. The main area displays a histology slide with a play button overlay. On the right, a chat window says 'Welcome to PathChat!' with a globe icon and a text input field at the bottom labeled 'Type your message here...'.

need help

- privacy-preserving, edge-focused, peer-to-peer inference network:
- map incentives
- linux foundation technical advisory committee for health work:
interested? email me + read charter
- need server-side rendering, cache invalidation for hot paths in cdn,
query planning, compute - github.com/uwdata/mosaic/discussions/466#discussioncomment-10280239
- 2p storage: cloudflare.com/galileo + r2 = \$0 egress
 - draft of benchmark: hackmd.io/@onefact/neptune
- debug vector search: github.com/duckdb/duckdb_vss/issues/19 and
approx. nearest neighbors baseline
- use typing everywhere: github.com/righttyper/righttyper github.com/beartype/beartype
- understand color and character naming: doi.org/10.1073/pnas.210923711

revenue: insurance captives

stop loss insurance products

chase, boa - examples of public goods (chase started as a utility, logo like a well; boa started after a fire!)

marketing: open source journalism

torch→tensorflow→pytorch→jax→observable.com&mosaic
→github.com/gfx-rs

- 100+ signals + crm + seo + \$10k/mo google ad spend
- local news source catalogue
- quarterly drug prices

justonerecord.org (beta)

npr_story - kingsley_post

