

Under the surface

Yi Liu

Senior research associate in health data science

P3 away day
14th June 2023

whoami

- originally from China
born in Baise (Bose), Guangxi
did undergrad studies
in Wuhan, Hubei
- 2012 - 2017, PhD in Economics,
University of Birmingham
- 2017 - 2018, Postdoc research
fellow, College of Social Sciences
& International Studies,
University of Exeter
- 2018-11 – present, SRA in health
data science, DMER, MRC IEU
 - EpiGraphDB
 - Trait mappings using ontology and
language models (“vectology” project)
 - EpiGraphDB-ASQ
 - Automation in systematic reviews; funded
by WCRF, Co-PI with Maria
 - A couple collaboration projects
 - Will aim to get more stats focused
projects done in IEU 3

Research motivations

- Complex network analysis
- Computational and statistical methods in causal inference
- Machine learning and predictive analytics
- Natural language processing

Academic research

- Autonomy
- Trying out latest & greatest things
 - or even better, being part of them
- ??? What would I do in the future?

Grow a UNIX beard
*eventually maybe
in a decade far, far
away*



IT MUST BE THE BEARD

Programming language developers grouped by facial hair



ADA, C#, COBOL,
ERLANG, FORTRAN,
HASKELL, & PROLOGUE



BASIC, PERL,
SIMULA, & SMALLTALK



PHP &
RUBY ON RAILS



C, C++, JAVA,
LISP, & PASCAL



My next big challenge

Getting a grant / fellowship

- Support research independence
- Even more autonomy
- Help rekindle old collaboration relationships and create new ones

stable-diffusion!

```
1 prompt = """Complex network analysis"""
2 generator = torch.Generator("cuda").manual_seed(10086)
3 image = pipe(prompt, generator=generator).images[0]
4
5 image.save(f"foobar.png")
6
7 image
```

