# What can PL folks do about climate change?

Benjamin C. Pierce

University of Pennsylvania

# What can PL folks do about climate change?

Benjamin C. Pierce

University of Pennsylvania

individual

PL researcher

computer scientist

employee

citizen

# What can I do as an individual?

#### recycle

### fly less

drive an EV

### install heat pumps

insulate

eat less meat

cycle / walk

etc., etc., etc.

What can I do as a citizen?

Vote

# What can I do as a PL researcher?

## Ideas welcome!

In particular...



Sun 14 - Sat 20 January 2024 London, United Kingdom

Attending - Program - Tracks - Organization - Q Search Series -

POPL 2024 (series) / PROPL 2024 (series) /

### **Programming for the Planet (PROPL)**

proposs into accurate indicators



There are simultaneous crises across the planet due to rising CO<sub>2</sub> emissions, rapid biodiversity loss, and desertification. Assessing progress on these complex and interlocking issues requires a global view on the effectiveness of our adaptations and mitigations. To succeed in the coming decades, we need a wealth of new data about our natural

**Important Dates** 

Sat 20 Jan 2024 Workshop

000

Anil Madhavapeddy and Dominic Orchard, co-chairs

with sufficient trust in the resulting insight

### Does it have to have something to do with PL?

# What can I do as a computer scientist?



Reducing carbon footprints of conferences

e.g., reboot the SIGPLAN Climate Committee?

Cross-disciplinary

Machine learning for climate change Cf. Computing Reviews survey by Rollnick et al.

Improving distributed systems to support climate science



Cambridge Centre for Carbon Credits (4C)

Virtual conference platforms Midspace, etc.

Midspace

Carbon footprint of cloud computing / LLMs / online gaming / ... Forthcoming(?) NSF Expedition led by Brooks and Lee

And much more!

# What can I do at a university / company?

## Probably lots going on in your organization!

Probably easy to get involved!

Thank you!