

# teaching *systems*

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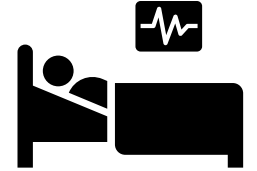
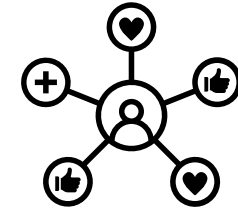
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systems ...

... from the perspective of a data systems person

applications



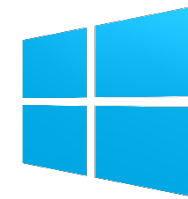
frameworks

TensorFlow  
PyTorch



APACHE  
Spark™  
PostgreSQL

operating system

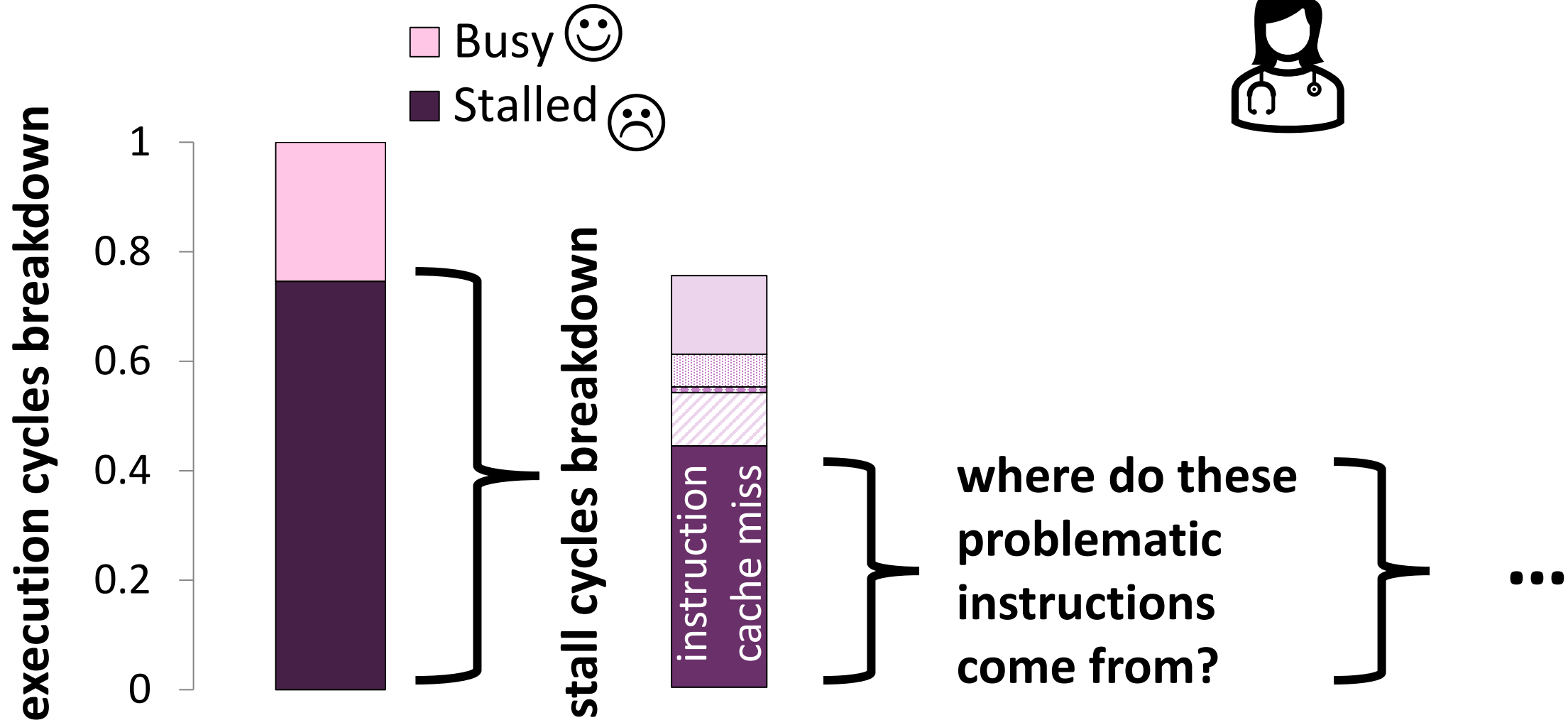


hardware



deals with building the layers below applications  
& the interactions across layers

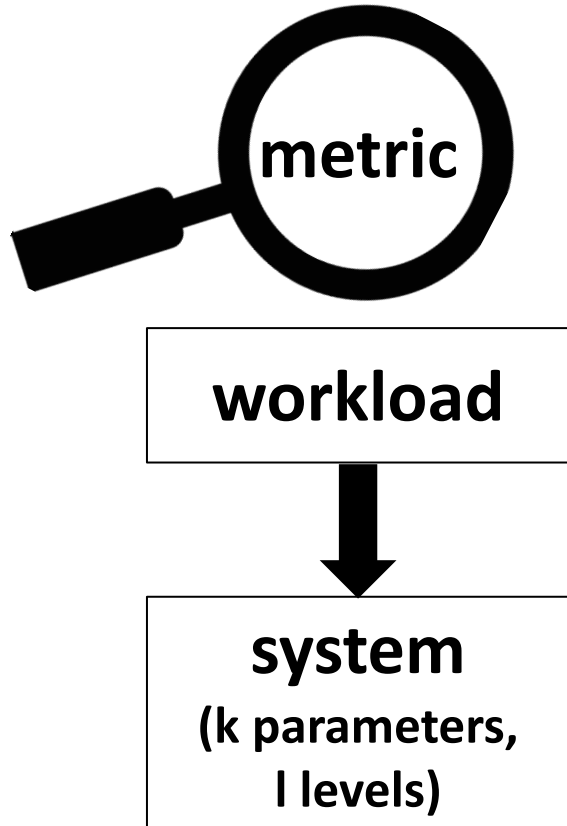
# playing doctor with computer systems



how does a system perform?

what can we do to improve the performance?

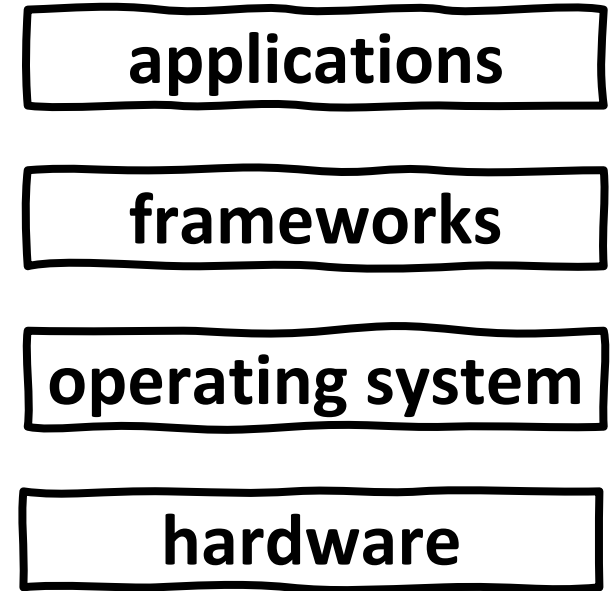
# investigating systems performance



methodology to  
design experiments



tools to run experiments  
& collect results



understanding  
systems layers to  
interpret results

# diversity in systems

## % of female authors

- **computer systems research = 10.3%**
- **computer science average = 14.1%**

source: Richter et al.

[“Why Are There So Few Women in Computer Systems Research?”](#)

- **unfortunate stereotypes for “a successful systems person”**
- **our teaching can help to break the stereotypes**
- ***systems can be learned by all if you want & have time to learn***

**thank you!**