

Version 8.9 NeurIPS 2020 Expo day

Why Vowpal Wabbit?

Step 1: Basics Seek/Avoid

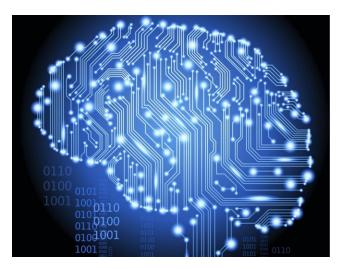


Step 2: Advanced Rich Sense Planning

Step 3...

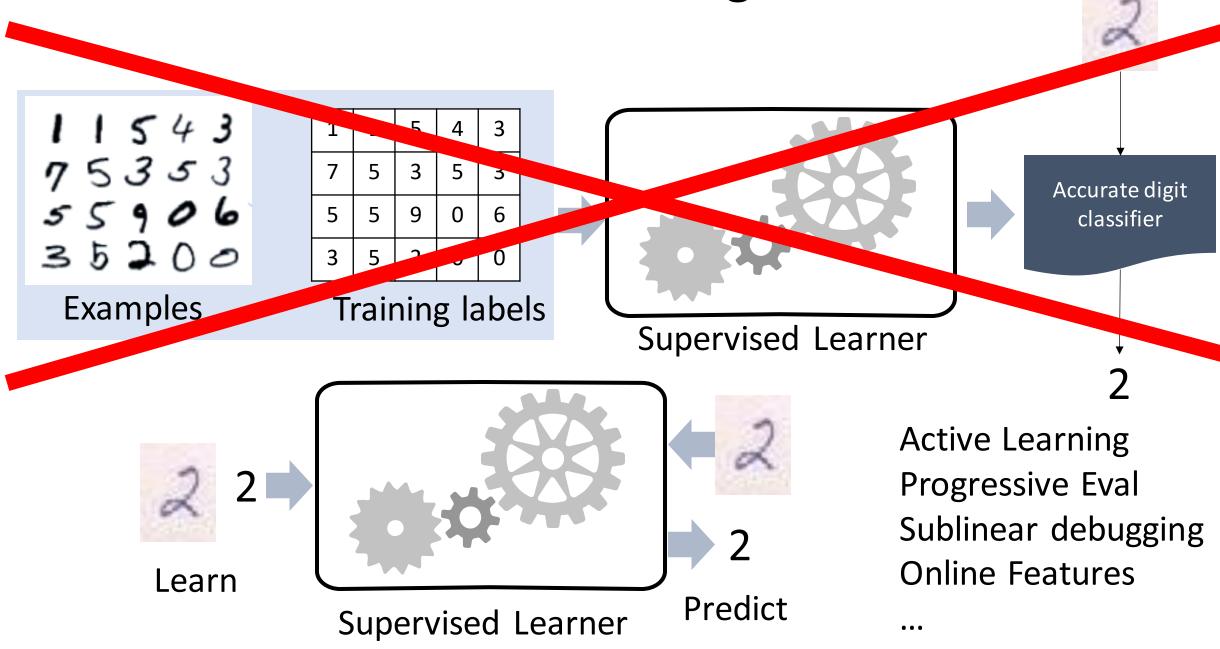
Step 4...

How do you AI?



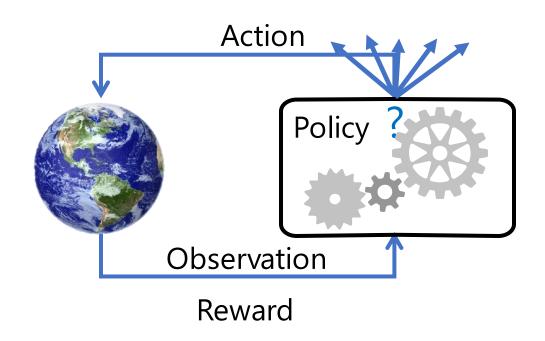
How do you do basic intelligence?

1: Online Learning



2: Interactive Reinforcement Learning





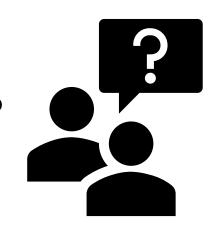
Contextual Bandits
Explore/Exploit
Learning to search
Counterfactual eval

• • •

Goal: Find a policy maximizing the sum of rewards

3: Research Support

How many other research problems have taken 70 years to solve? Humility is in order.



Open Source (BSD license) https://github.com/VowpalWabbit

Learning Reduction based modularity

Many, many papers incorporated

Many experiments with different ways of doing things

4: Widely Useful

Core language = C++, with bindings in Python, Java, C#.

Command line / Daemon / Library / Services



Install: pip install / apt-get / nuget / maven



Theoretical foundations!





















Vowpal Wabbit builds our understanding of basic intelligence.