

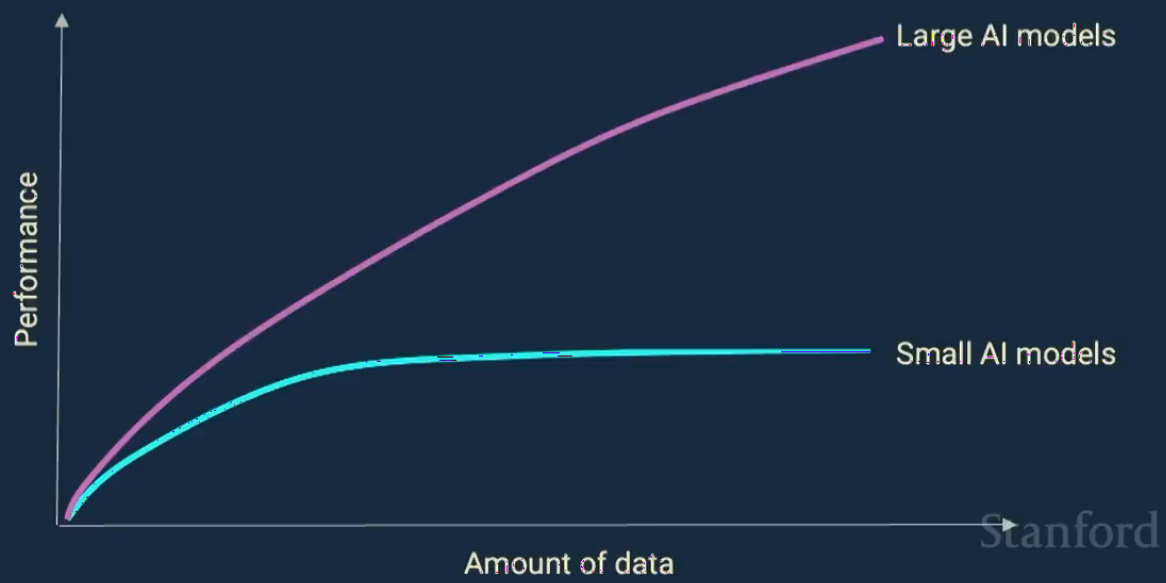
Supervised Learning (labeling things)

Input (A)	Output (B)	Application
Email	Spam? (0/1)	Spam filtering

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2010-2020: Large scale supervised learning



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This decade: Generative AI

Text generation process

I love eating _____

prompt

bagels with cream cheese

my mother's meatloaf

out with friends

AI output

How it works

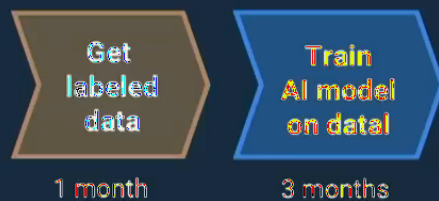
Generative AI is built by using supervised learning ($A \rightarrow B$) to repeatedly predict the next word.



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Prompting is revolutionizing AI application development

Supervised learning



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Value from AI technologies: Today → 3 years



Supervised learning
(Labeling things)



Generative AI



Unsupervised
learning

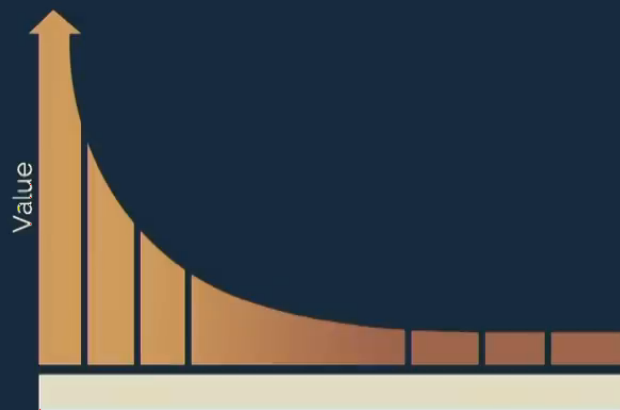
Reinforcement
Learning

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Why isn't AI widely adopted yet?

Customization (long tail) problem and low/no code tools



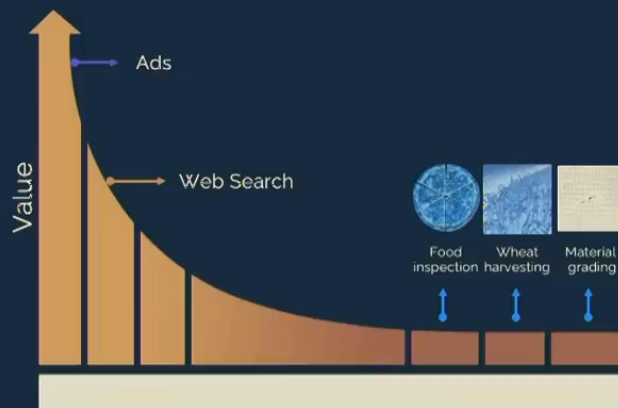
All potential AI projects, sorted in decreasing order of value



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All potential AI projects, sorted in decreasing order of value

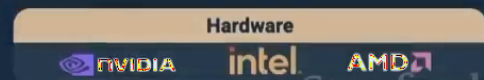


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Opportunity from a new general purpose technology

- Many valuable AI projects are now possible. How do we get them done?
- *Starting new companies is an efficient way to do this.*
- Incumbent companies also have opportunities to integrate AI into existing businesses.

The AI stack

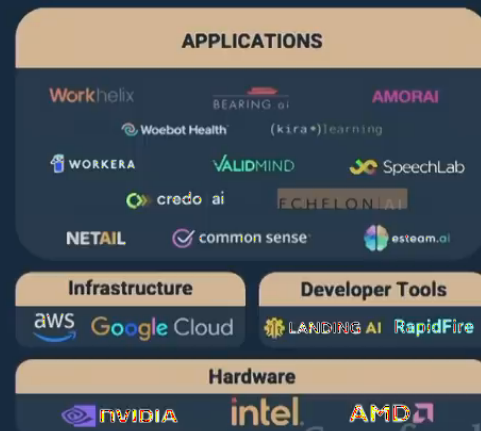


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Opportunity from a new general purpose technology

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The AI stack



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Process for building startups

Idea

Validate
Stage 1

Recruit CEO
Stage 2

Build w CEO
Stage 3

1 month

2 months

3 months

Market & technical
validation by AI
Fund team.

Recruit CEO to
build with us
("Founder in
residence").

Deep customer
and technical
validation. Build
prototype.


BEARING.ai

Green shipping powered by AI



Dylan Keil

Stanford

Andrew Ng

Process for building startups: Concrete ideas

Idea

Validate
Stage 1

Recruit CEO
Stage 2

Build w CEO
Stage 3

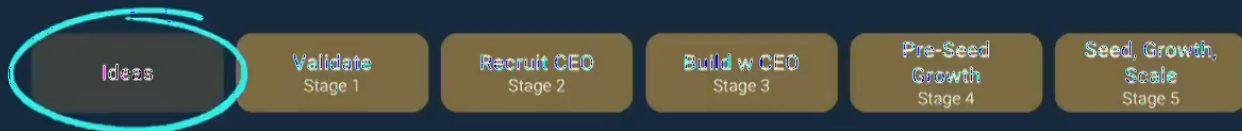
Pre-Seed
Growth
Stage 4

Seed, Growth,
Scale
Stage 5

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Process for building startups: Concrete ideas



Not concrete:

Apply AI to financial services. (Or logistics, supply chain...).

Concrete idea:

BuyGPT eliminates commercials by automatically buying every product in every ad, in exchange for not having to see any ads.

Concrete ideas:

- Can be validated or falsified efficiently
- Gives clear direction to execute
- Often from a subject matter expert who's deeply thought about a problem



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Risks of AI

- AI today has problems with bias, fairness, accuracy, But the technology is improving quickly.
- AI will disrupt many occupations.



[Credit: Eloundou et al., 2023]



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Risks of AI

- Artificial General Intelligence (AI that can do anything a human can do) is still decades away.
- AI creating extinction risk for humanity is wildly overhyped.
 - Human society has ample experience steering very powerful entities (such as corporations and nation states).
 - AI develops gradually, and the "hard take off" scenario (where AI suddenly achieves superintelligence overnight) is not realistic.
- AI is an important piece of the solution to the real existential risks to humanity (the next pandemic, climate change, ...).

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