Too Expensive (Money) Is Current Machine Learning Paradigm
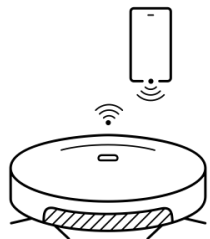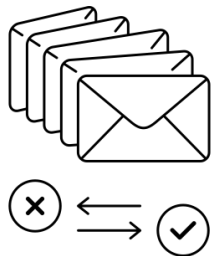
Making Real AI - Series

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Background:
AI is Already Everywhere. It Succeeds.
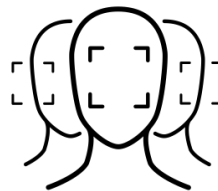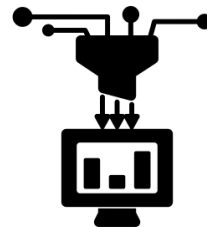
Cleaning Robots

Email Spam Filtering

Recommendation System
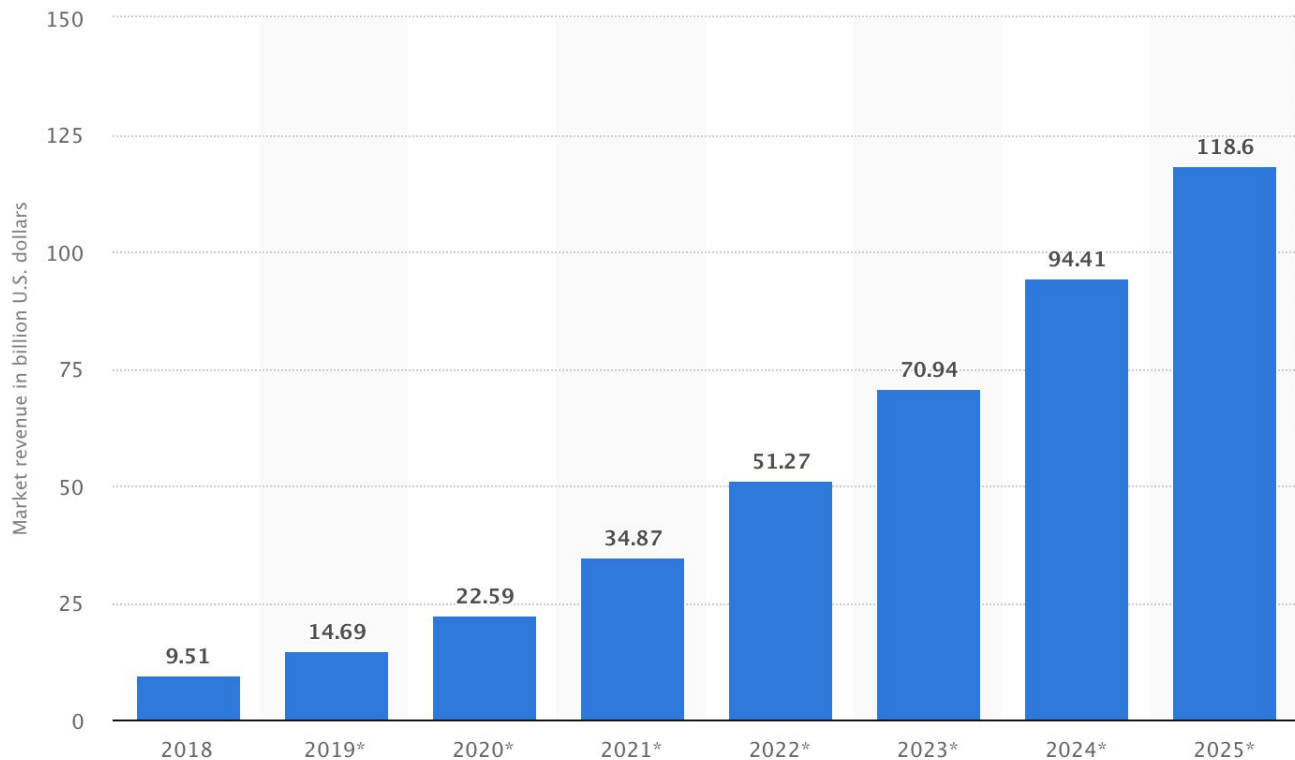
Face Detection

Business Intelligence

More

Market Size is Huge

(Liu, 2019)

BUT

"We have seen a surprisingly consistent pattern in the financial data of AI companies, with gross margins often in the **50-60%** range – well below the **60-80%PLUS** benchmark for comparable SaaS businesses."

(Casado & Bornstein, 2020)

Cost 1 - Retraining Machine Learning Models

"Training a single AI model can cost hundreds of thousands of dollars (or more) ...... retraining is increasingly recognized as an ongoing cost, since the data that feeds AI models tends to change over time …..."
(Casado & Bornstein, 2020)

Cost 2 - Users' Open Intents

"**Users can – and will – enter** ... **anything into an AI app** ……

Handling this huge state space tends to be an ongoing chore."

(Casado & Bornstein, 2020)

Root Cause

is current machine learning paradigm assuming static task/data.

1. Task/data change costs a lot.

2. Task-specific machine learning doesn't handle users' open intents. Task enumeration cost is too high.

Current task-specific machine learning paradigm is expensive,

Let's shift the paradigm.

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- Casado, M., & Bornstein, M. (2020, February 16). *The New Business of AI (and How It's Different From Traditional Software).* Andreessen Horowitz. https://a16z.com/2020/02/16/the-new-business-of-ai-and-how-its-different-from-traditional-software/

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