

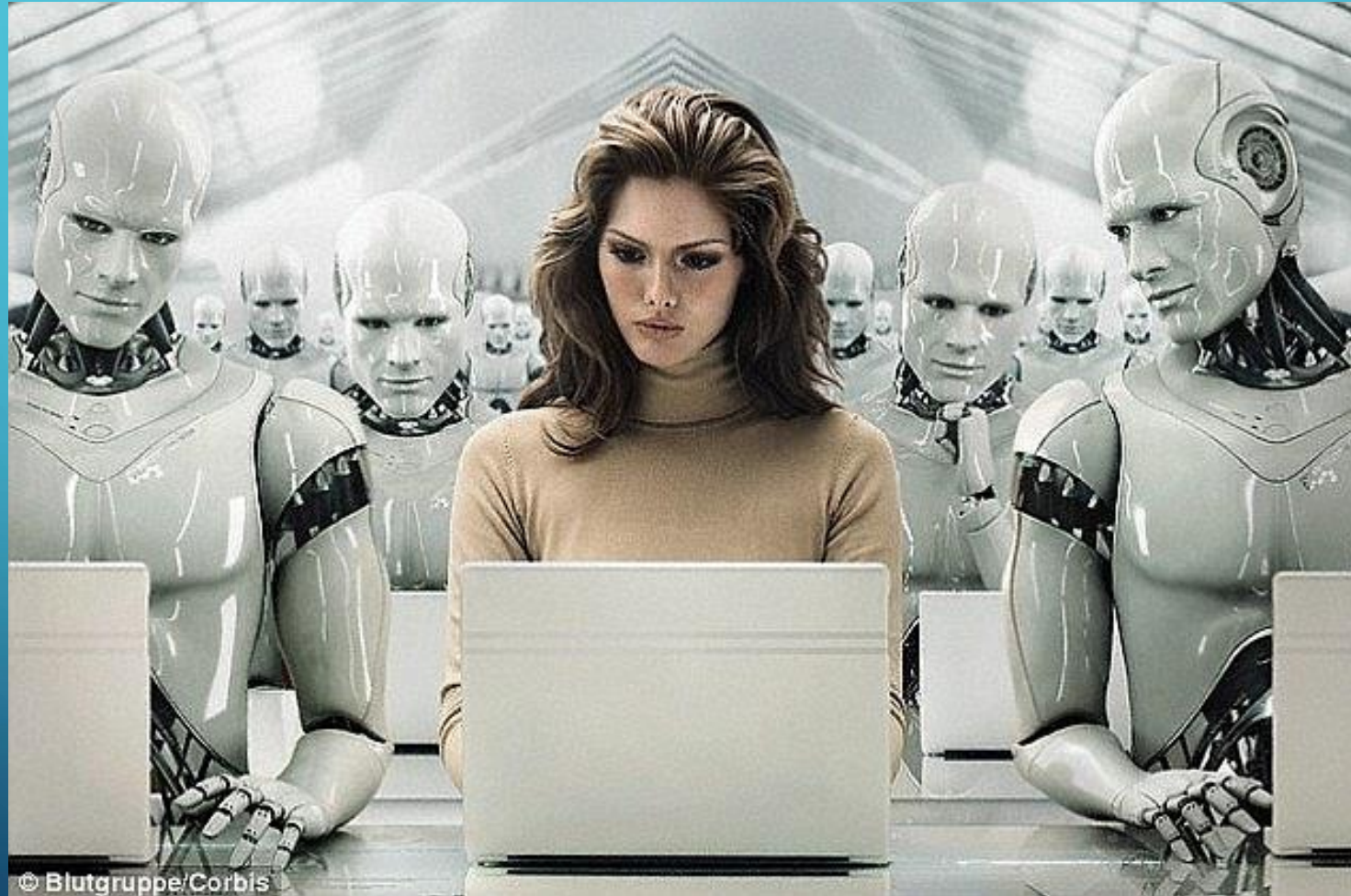
An abstract graphic on the left side of the slide, consisting of a network of white lines and small circles on a blue gradient background. The lines are vertical and horizontal, with some diagonal branches, resembling a circuit board or a neural network diagram. The circles are small and white, some of which are connected to the lines.

ARTIFICIAL INTELLIGENCE

UNDER THE HOOD

$$\begin{aligned}
\frac{\partial^2 f}{\partial \theta^2} &= -r \cos(\theta) \frac{\partial f}{\partial x} - r \sin(\theta) \left(-r \sin(\theta) \frac{\partial^2 f}{\partial x^2} + r \cos(\theta) \frac{\partial^2 f}{\partial y \partial x} \right) - \\
&\quad r \sin(\theta) \frac{\partial f}{\partial y} + r \cos(\theta) \left(-r \sin(\theta) \frac{\partial^2 f}{\partial x \partial y} + r \cos(\theta) \frac{\partial^2 f}{\partial y^2} \right) \\
&= -r \cos(\theta) \frac{\partial f}{\partial x} + r^2 \sin^2(\theta) \frac{\partial^2 f}{\partial x^2} - r^2 \sin(\theta) \cos(\theta) \frac{\partial^2 f}{\partial y \partial x} - \\
&\quad r \sin(\theta) \frac{\partial f}{\partial y} - r^2 \sin(\theta) \cos(\theta) \frac{\partial^2 f}{\partial x \partial y} + r^2 \cos^2(\theta) \frac{\partial^2 f}{\partial y^2} \\
&= -r \cos(\theta) \frac{\partial f}{\partial x} - r \sin(\theta) \frac{\partial f}{\partial y} + r^2 \sin^2(\theta) \frac{\partial^2 f}{\partial x^2} - \\
&\quad 2r^2 \sin(\theta) \cos(\theta) \frac{\partial^2 f}{\partial y \partial x} + r^2 \cos^2(\theta) \frac{\partial^2 f}{\partial y^2}
\end{aligned}$$

SCARED OF AI



FACTORY WORKER



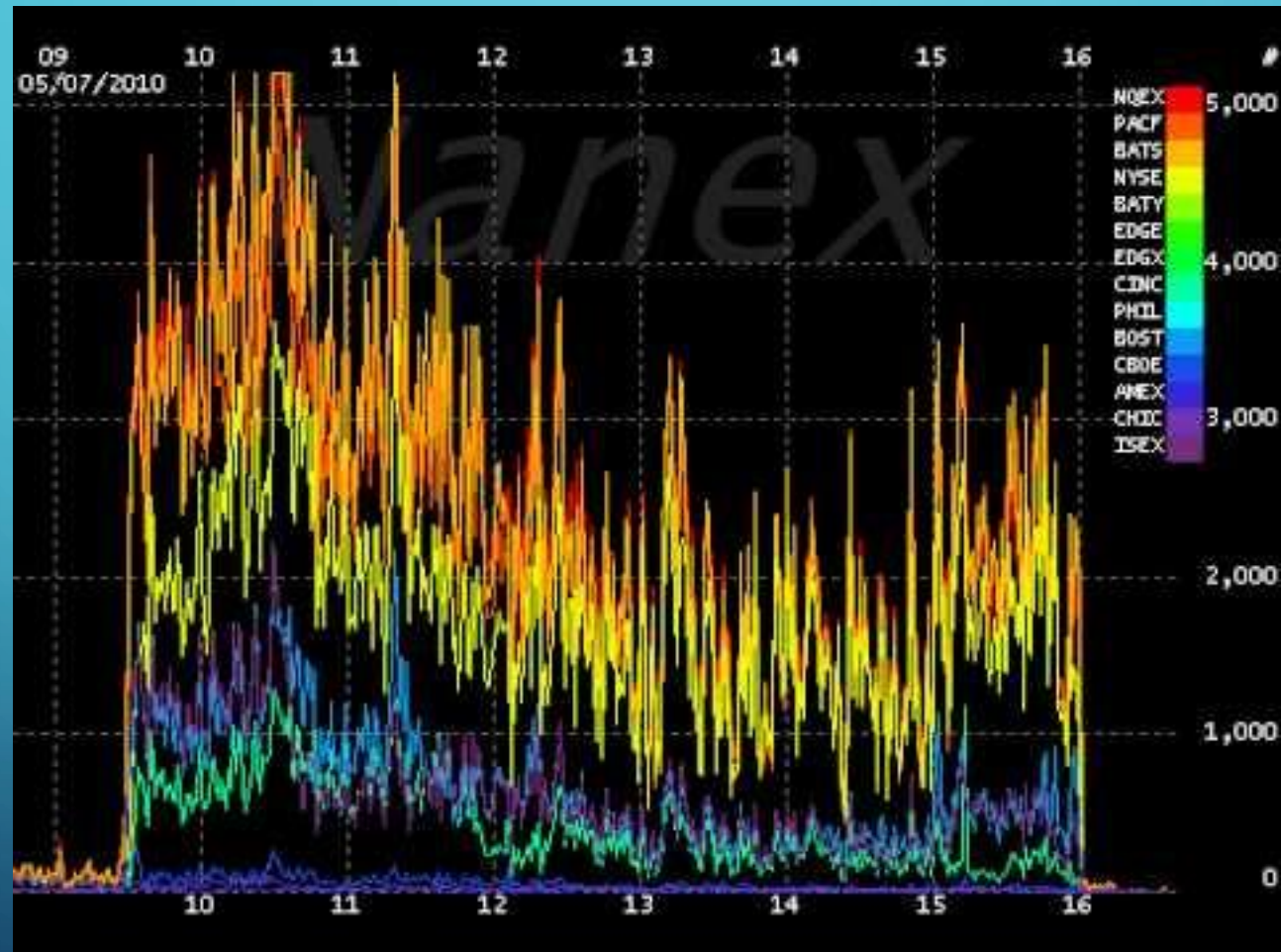
CHEF



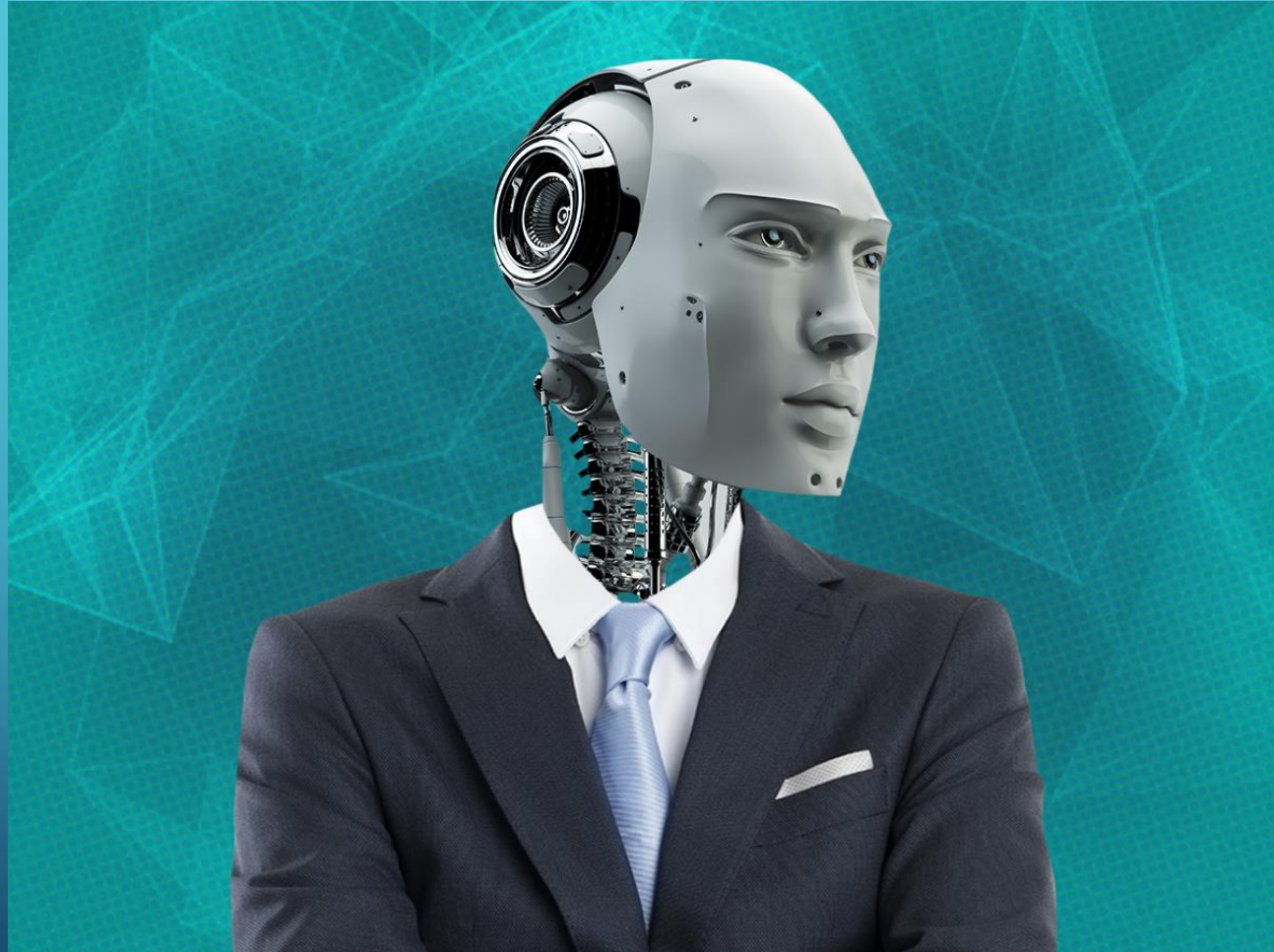
DRIVER

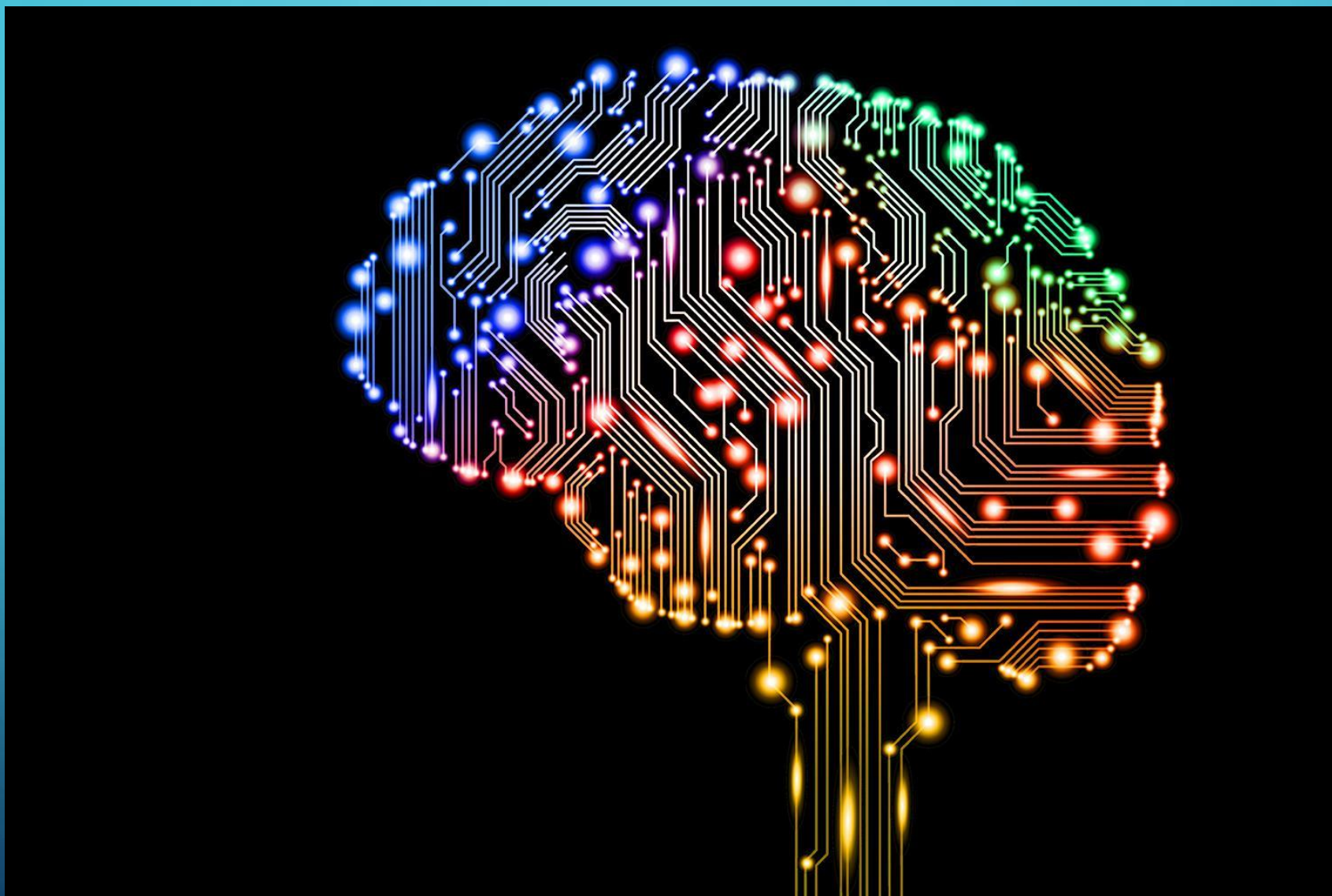


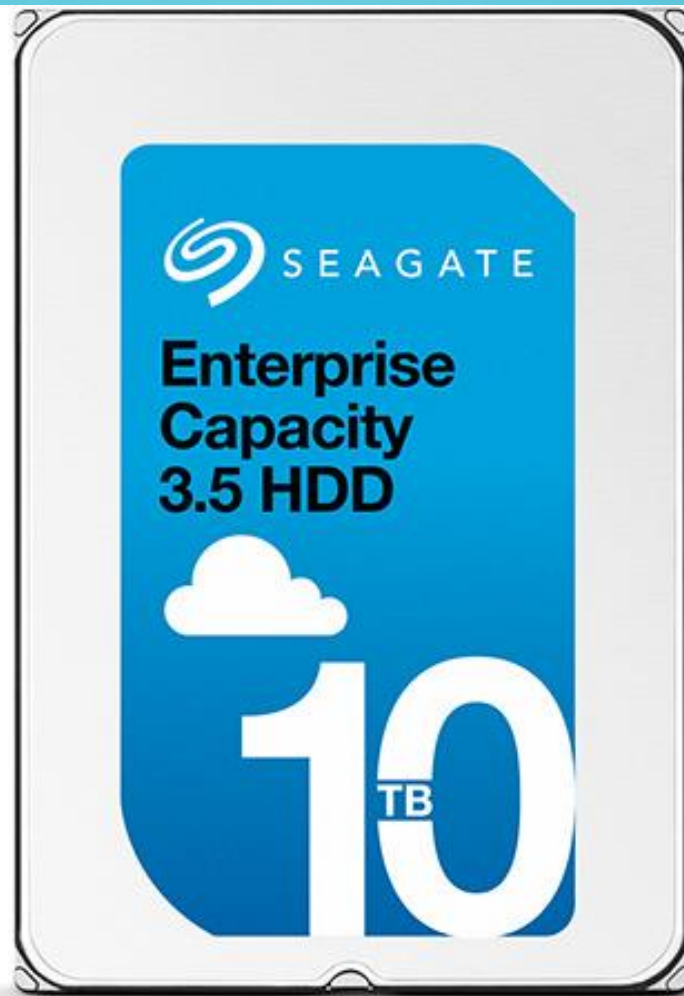
FINANCE



LAWYER





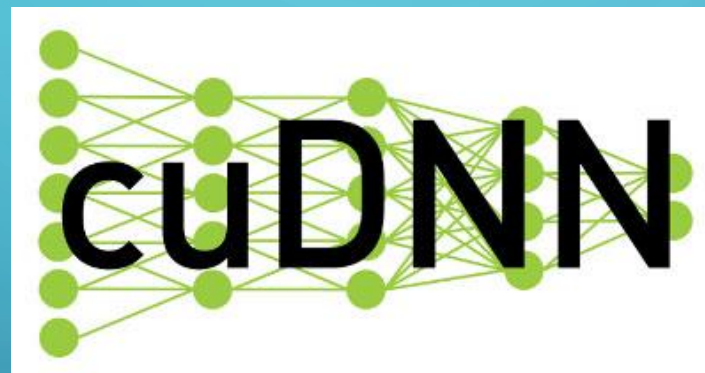
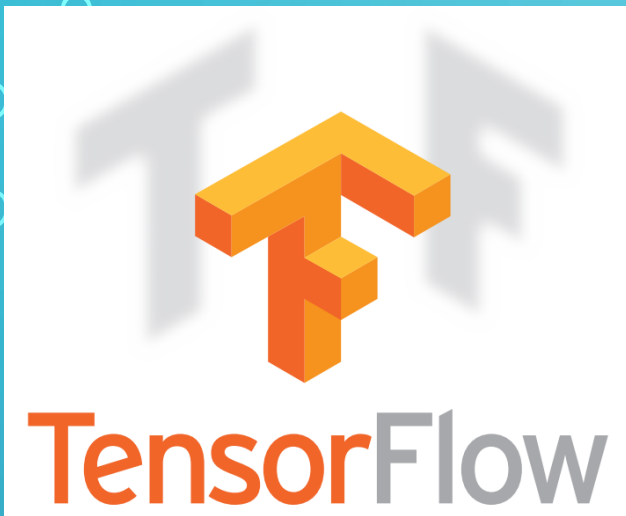


Geforce
GTX 1080



Pascal
GP104 GPU





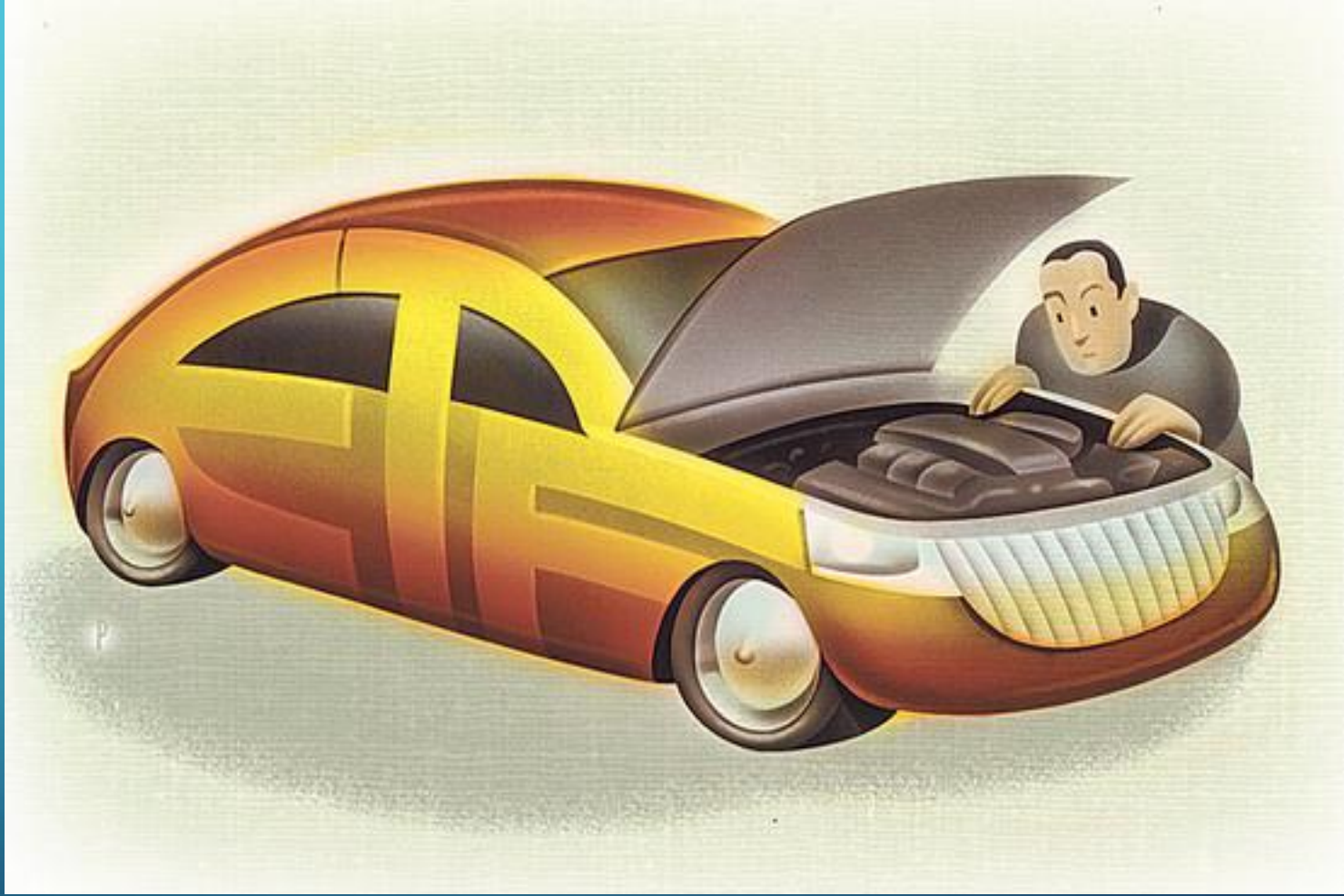
MICROWAVE COOKING OF AI

PRO

- Anybody Can Do It
- Turnkey Toolkits
- Free or Cheap Courses
- Runs on Laptop

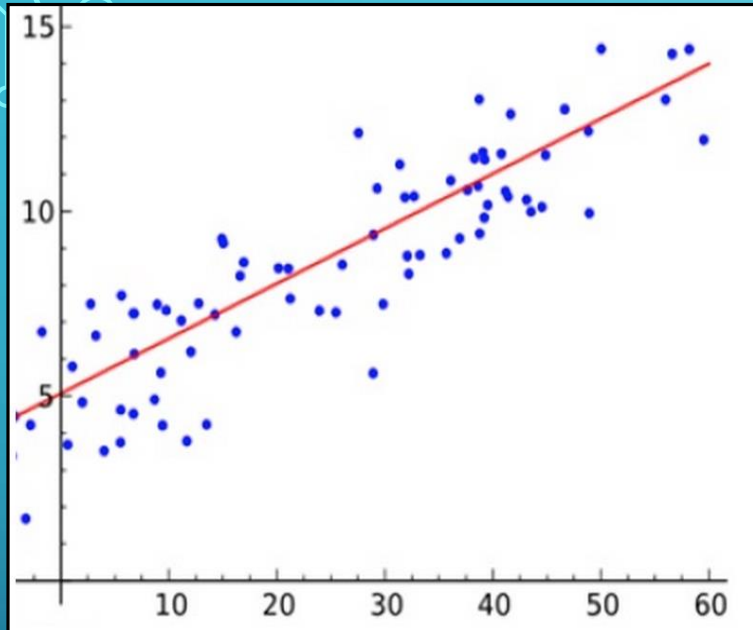
CON

- Amateur = Dangerous
- Hard Problems
- Domain Expertise
- Sophistication

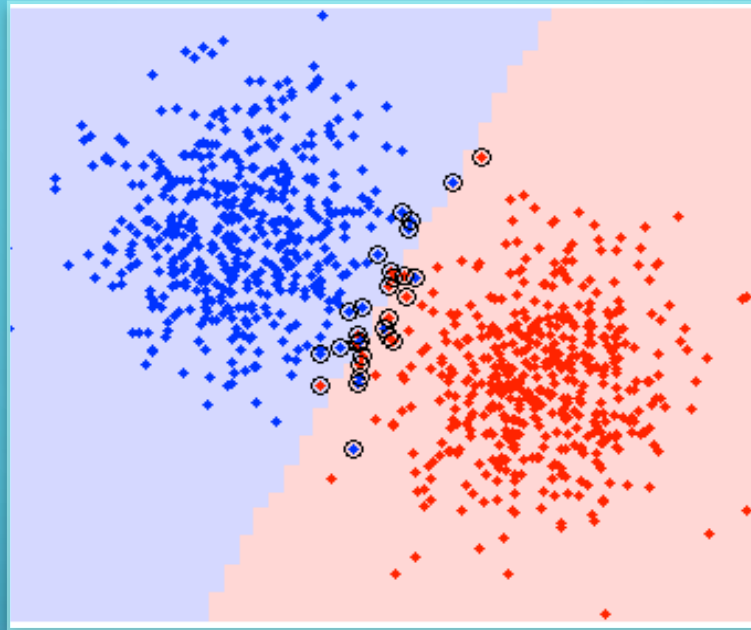


SOLVE ANY PROBLEM IN 4 STEPS

1. Define Goal
2. Data
3. Model (Less Wrong)
4. Decision / Presentation



REGRESSION

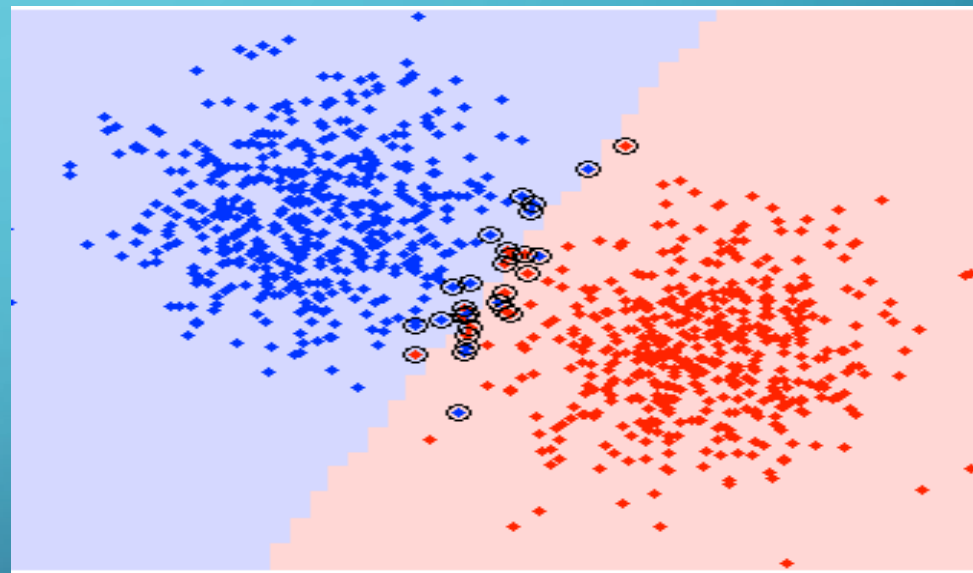
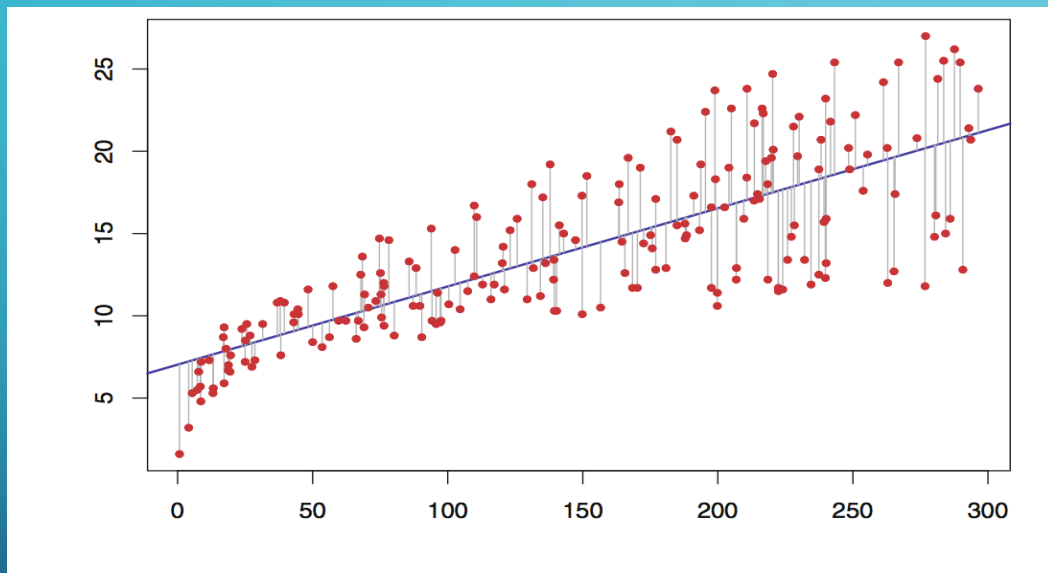


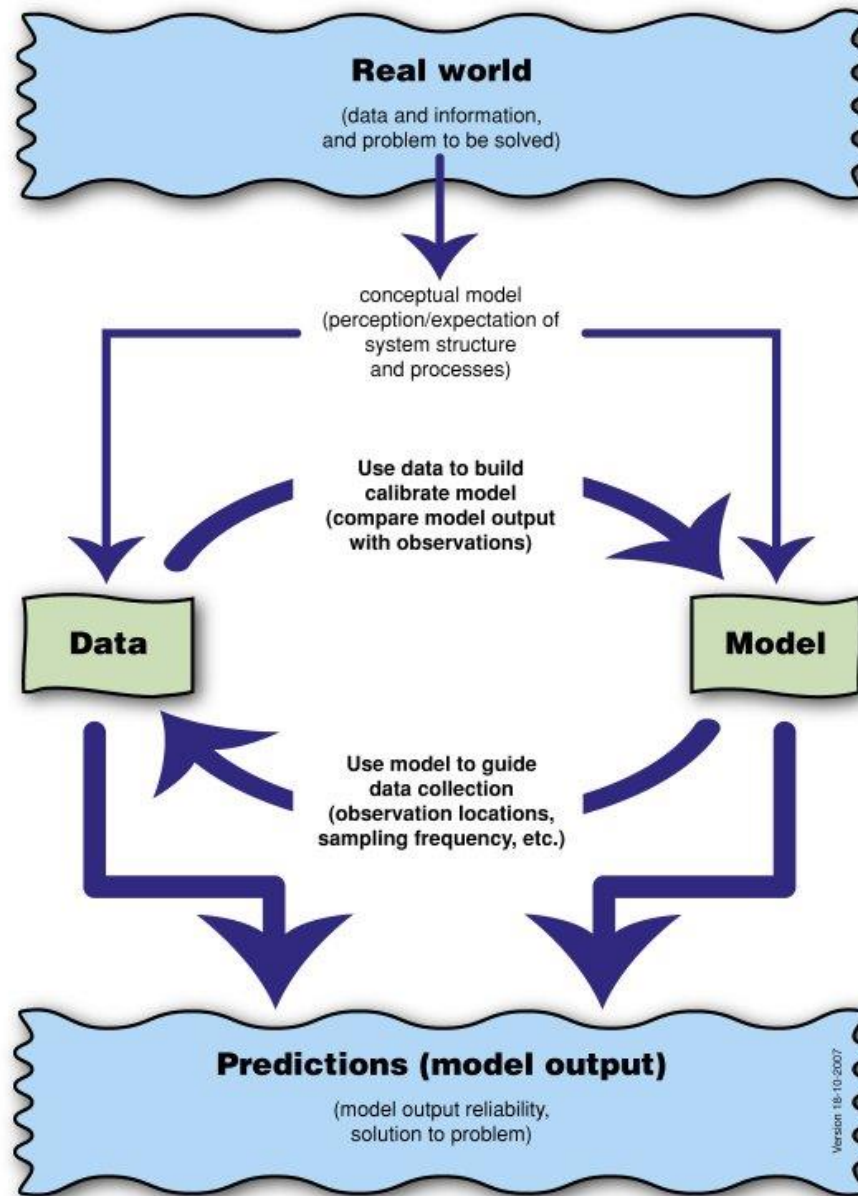
CLASSIFICATION

2			4	5	2.94
5		4			1
		5		2	2.48
	1		5		4
		4			2
4	5		1		1.12

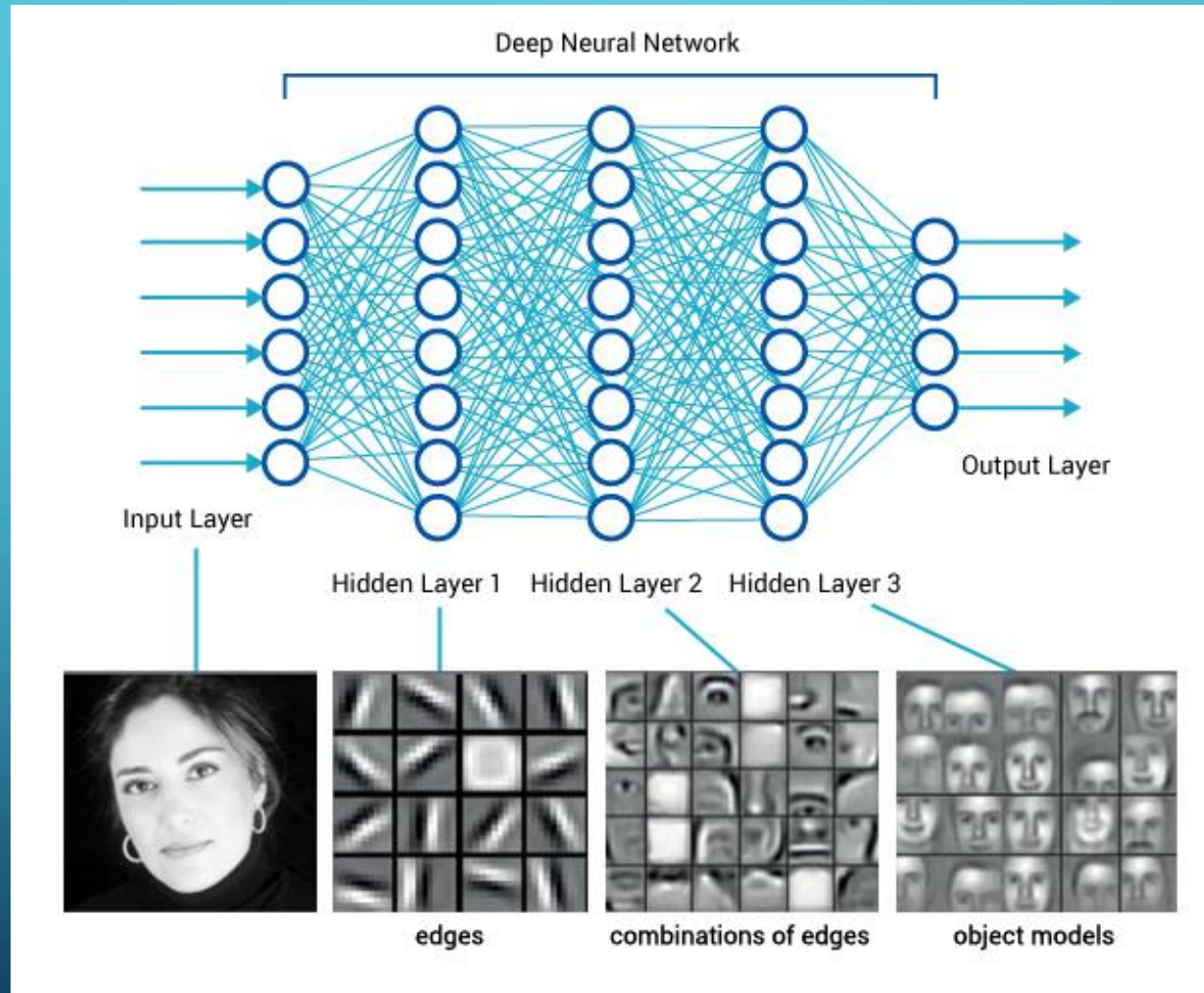
MISSING DATA

LESS WRONG

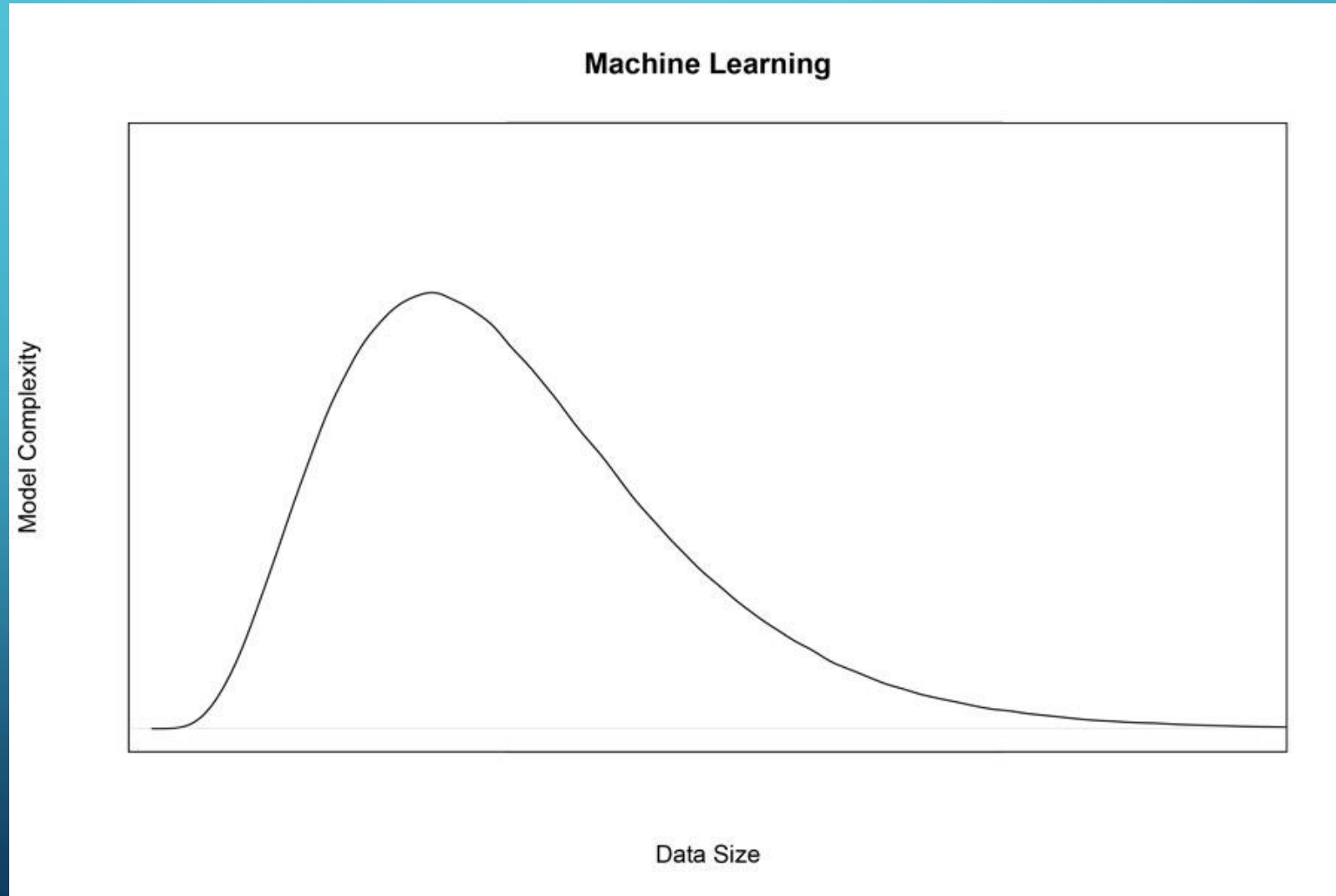




DEEP LEARNING



KNOWLEDGE GROWTH



SELF DRIVING CAR

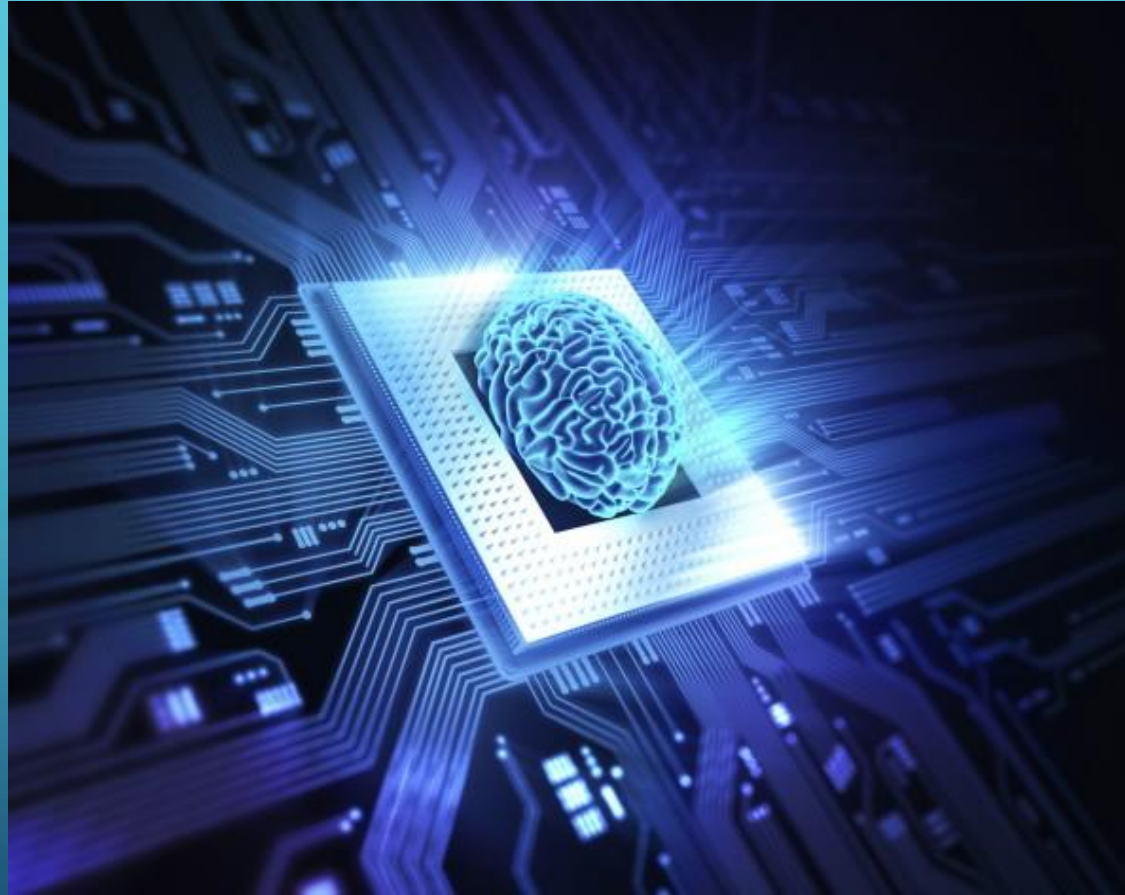
Objective = Minimize drive time

Conditions =

- Don't break laws
- Minimize Injury Risk

1. Camera Pixels >>> Deep learning >>> Stop Sign
2. Decision Tree >>> Stop required for legal condition
3. Breaking Amount >>> Minimize injury
4. Waiting Time >>> Drive Time + Injury Risk

WORLD DOMINATION FOR \$4500



EXAMPLES

- Chemical Liability Risk
- Product Recommendation
- Self Driving
- Hedge Funds & Twitter
- Predictive Policing
- Real Estate Valuation and Brokerage

The background is a blue gradient with decorative white circuit-like lines in the corners. These lines consist of straight segments and small circles, resembling a stylized electronic circuit or data paths.

THANK YOU

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