

 ADULT
LEARNING
SYMPOSIUM

The Future of Work and Learning Begins Now

Eddy Lee, PhD
2 November 2018

Supported by

 INSTITUTE FOR
ADULT LEARNING
SINGAPORE

AN INSTITUTE OF SKILLS *future* SG

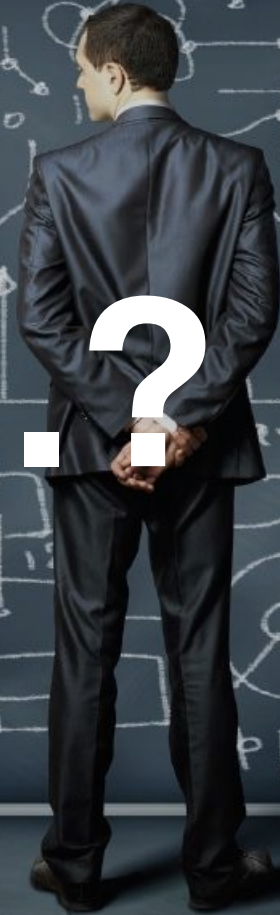


The Future of Work and Learning Begins Now

Eddy Lee, PhD



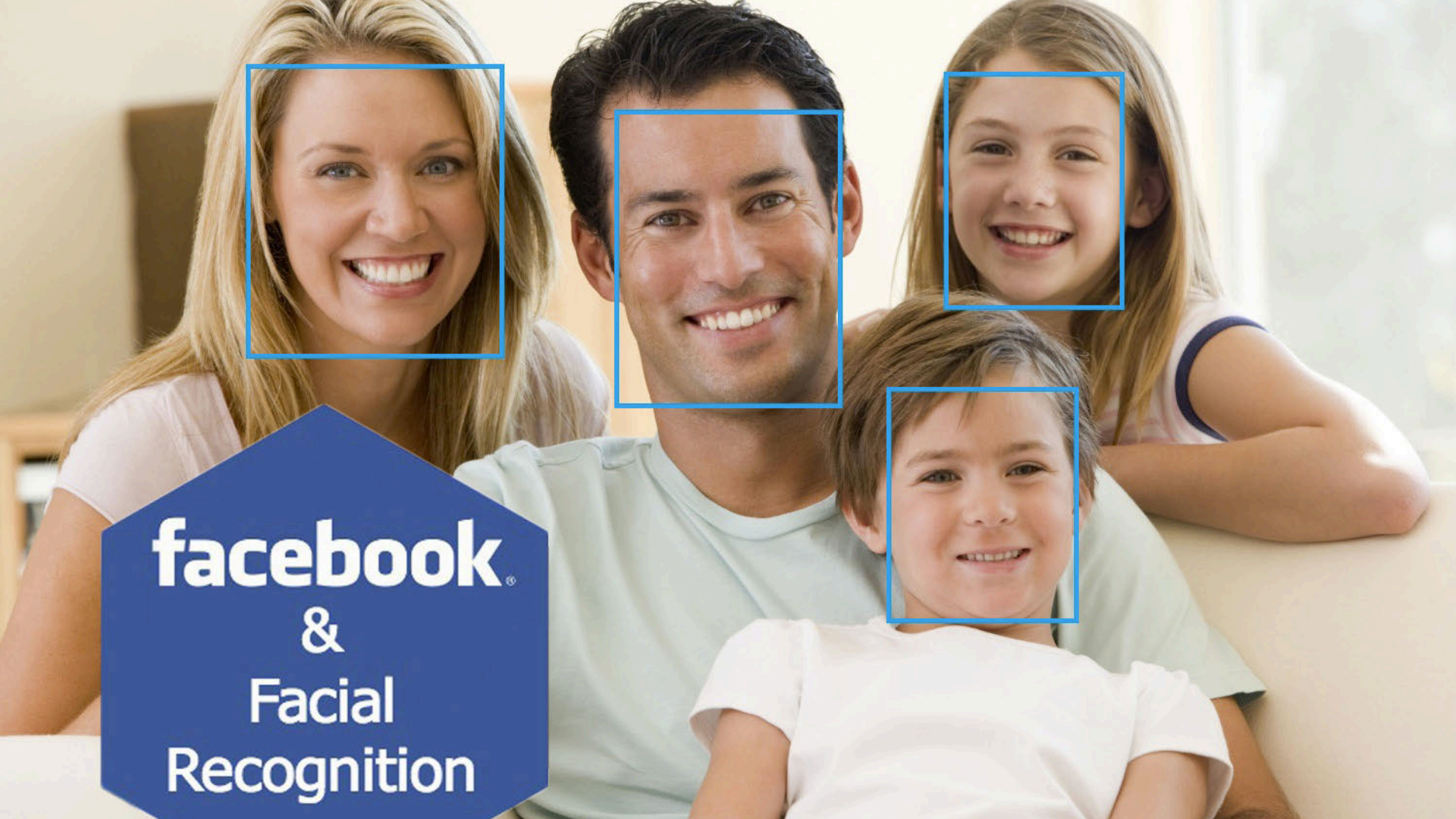
What is A.I.?





UNIVERSITY OF
MICHIGAN





facebook[®]
&
Facial
Recognition



s so weak

Videos Images Shopping More Search tools

,000 results (0.47 seconds)

the Iraqi Resistance to the Coalition Invasion Was S...
/content/dam/.../RAND_MG544.pdf RAND Corporation
document was made available from www.rand.org as a public service of ...
March and April 2003 was so weak. The research focused.

the Iraqi Resistance to the Coalition Invasion Was S...
books.org/...istance-to-the-coa...
get Why the Invasion Was So Weak (you can download ...
y write by

**July 2015
Answer**

uzzle of
/.../weak
USCH - &
- anomal
implies that
a.gov/abo
Growth - Federal ...
Bank of San Francisco
arter growth suggests that
appears to have been ...
crisis.pdf

why are pdfs so weak

All News Videos Images Shopping More S

About 225,000,000 results (0.42 seconds)

What security scheme is used by PDF password enc...
security.stackexchange.com/.../what-security-scheme-is-u...
Aug 3, 2015 - Many PDFs are distributed as encrypted PDFs to lock out s...
... There are two types of PDF protection: Password-based encryption and

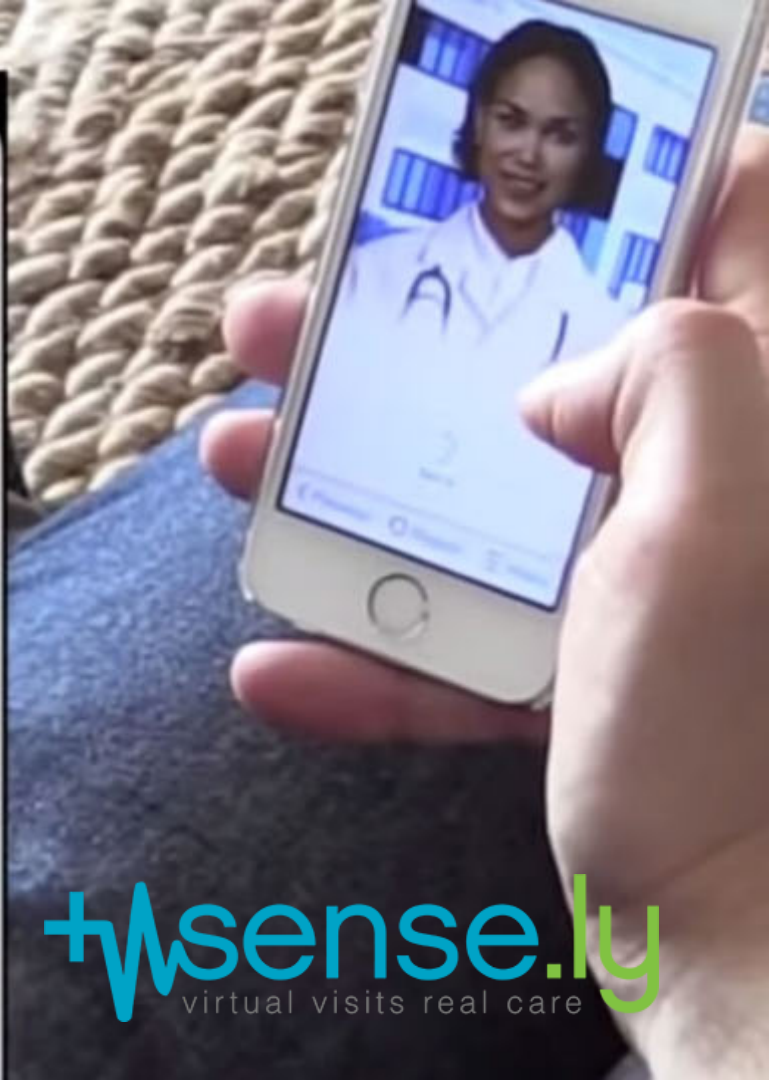
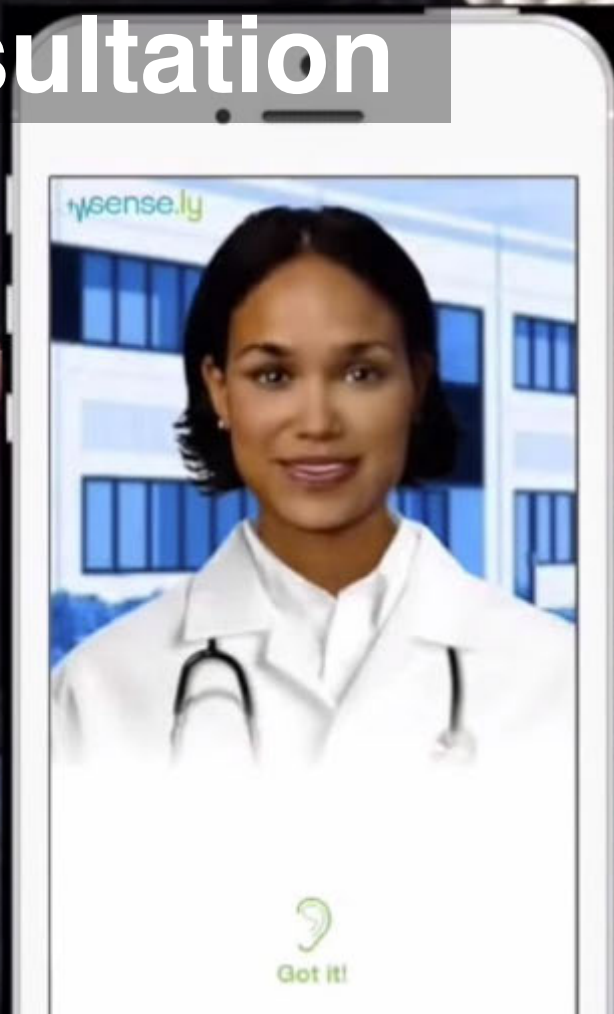
Why the Iraqi Resistance to the Coalition Invasion...
www.rand.org/content... RAND Corpora
This PDF document was g as a public se
resistance in March and arch focused.

WHY IS
www.physicsegypt.org
by SG Goradia - 2008
relative strengths of the
c. = ... The paper's abstr
of gravitation has so far
PhysicsEg
cles
spectively. ()
an nor the relat
) predicting the

**January
2016
Answer**

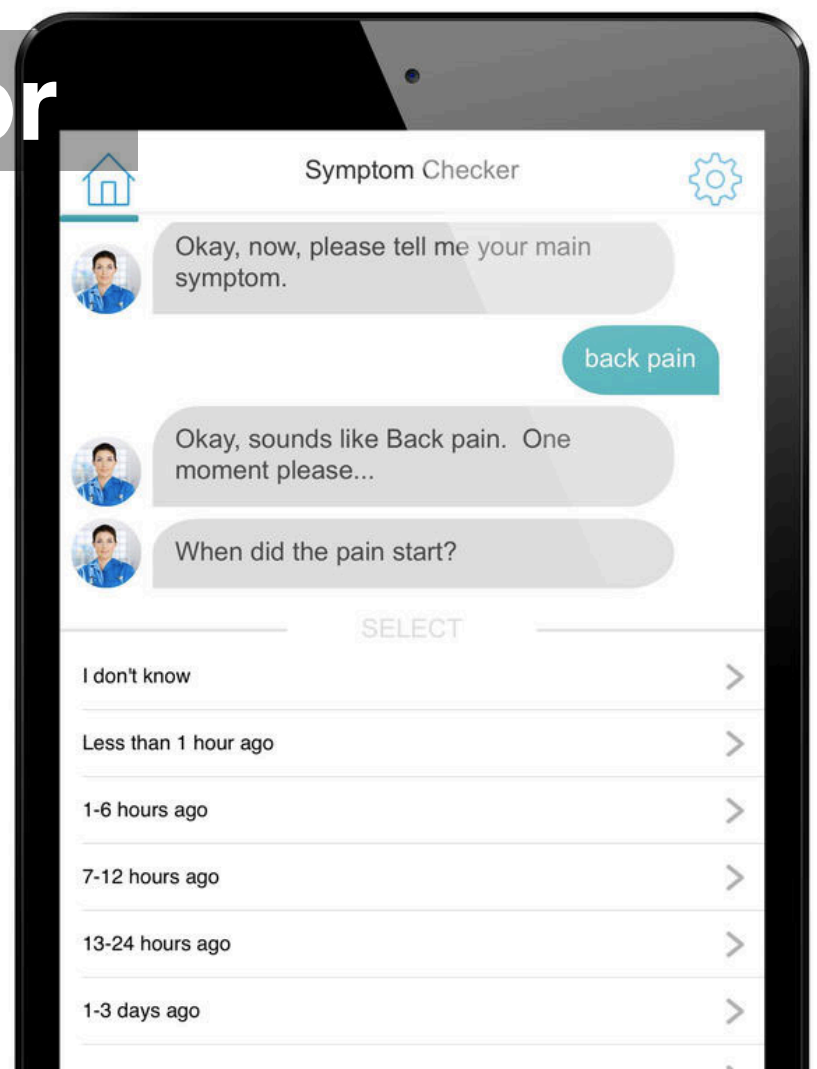
A.I. + Health

A.I. Consultation

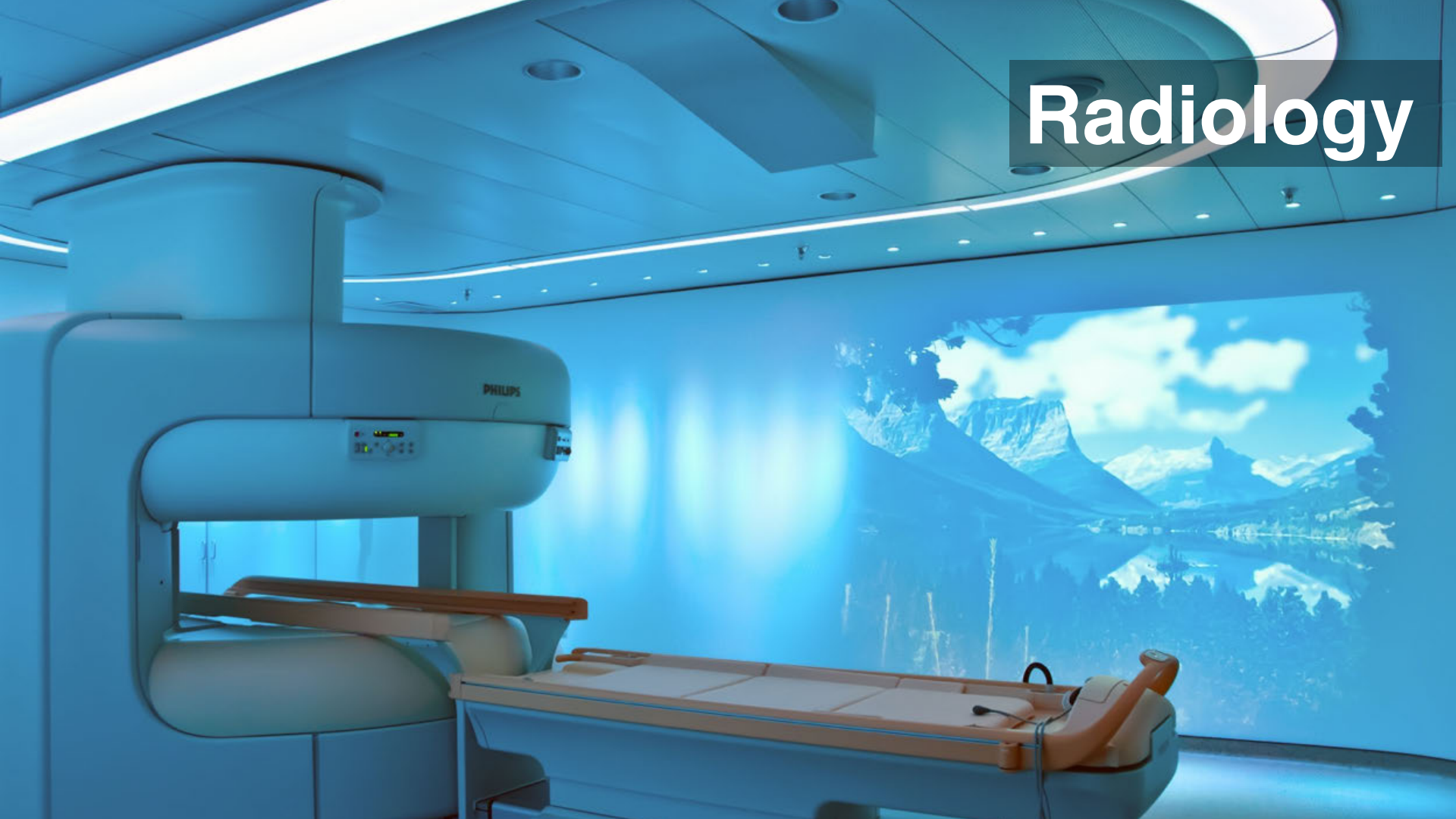


+sense.ly
virtual visits real care

Health Coordinator



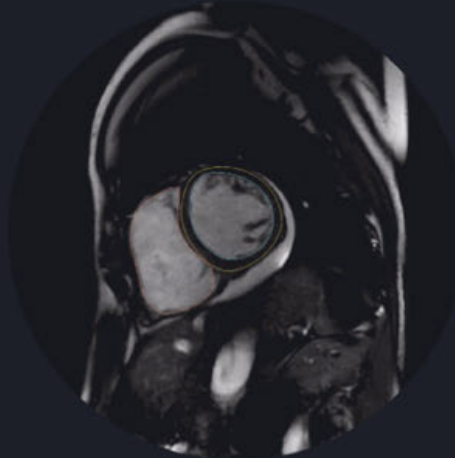
Radiology



Arterys Receives First FDA Clearance for Broad Oncology Imaging Suite with Deep Learning

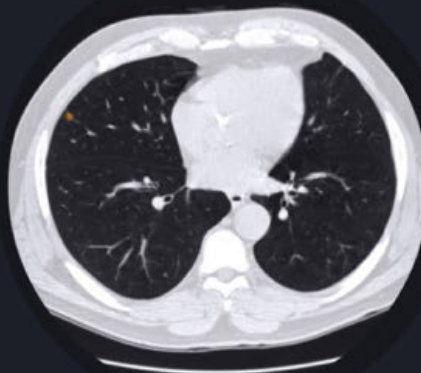


ARTERYS



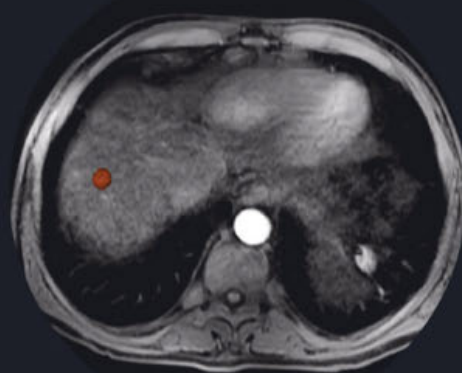
CARDIO AI

CE Marked, FDA cleared



LUNG AI

FDA cleared



LIVER AI

FDA cleared

Human vs A.I.



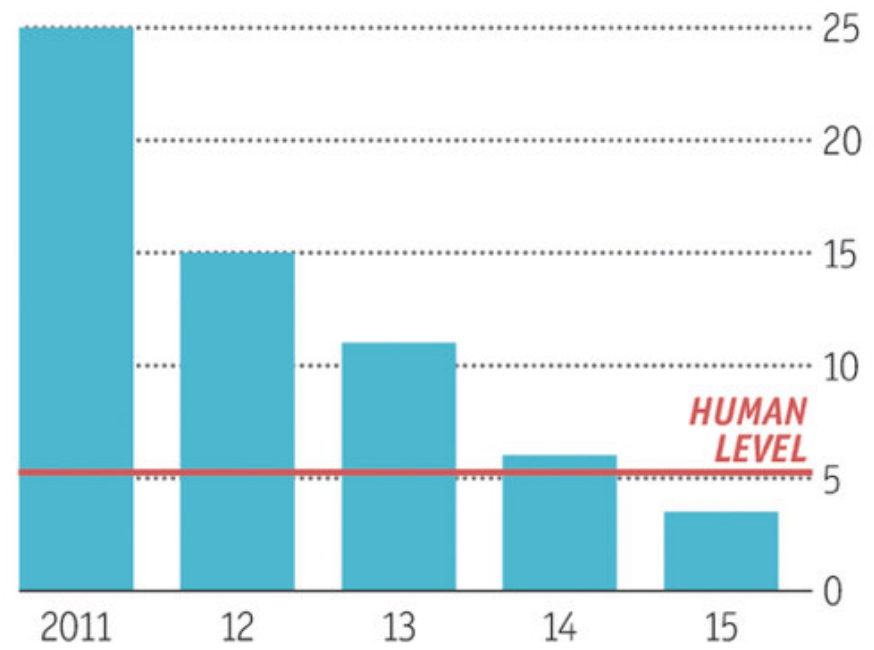
1997 IBM vs Kasparov



2015 ImageNet

Ever cleverer

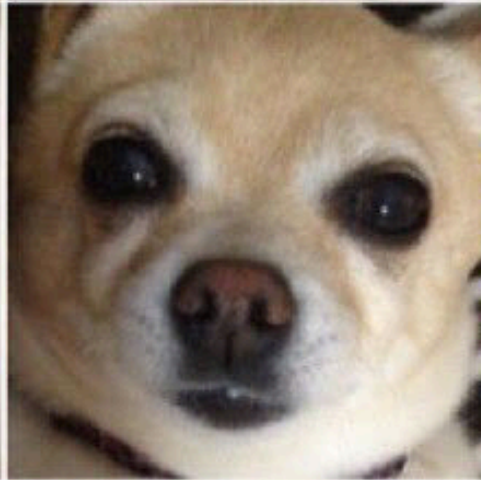
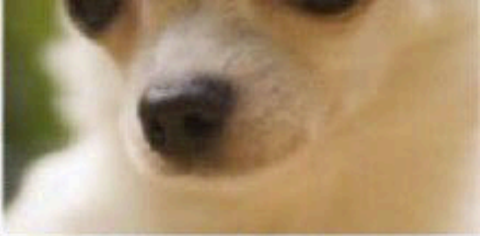
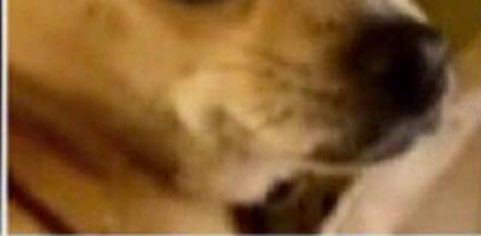
Error rates on ImageNet Visual Recognition Challenge, %



Sources: ImageNet; Stanford Vision Lab

Economist.com





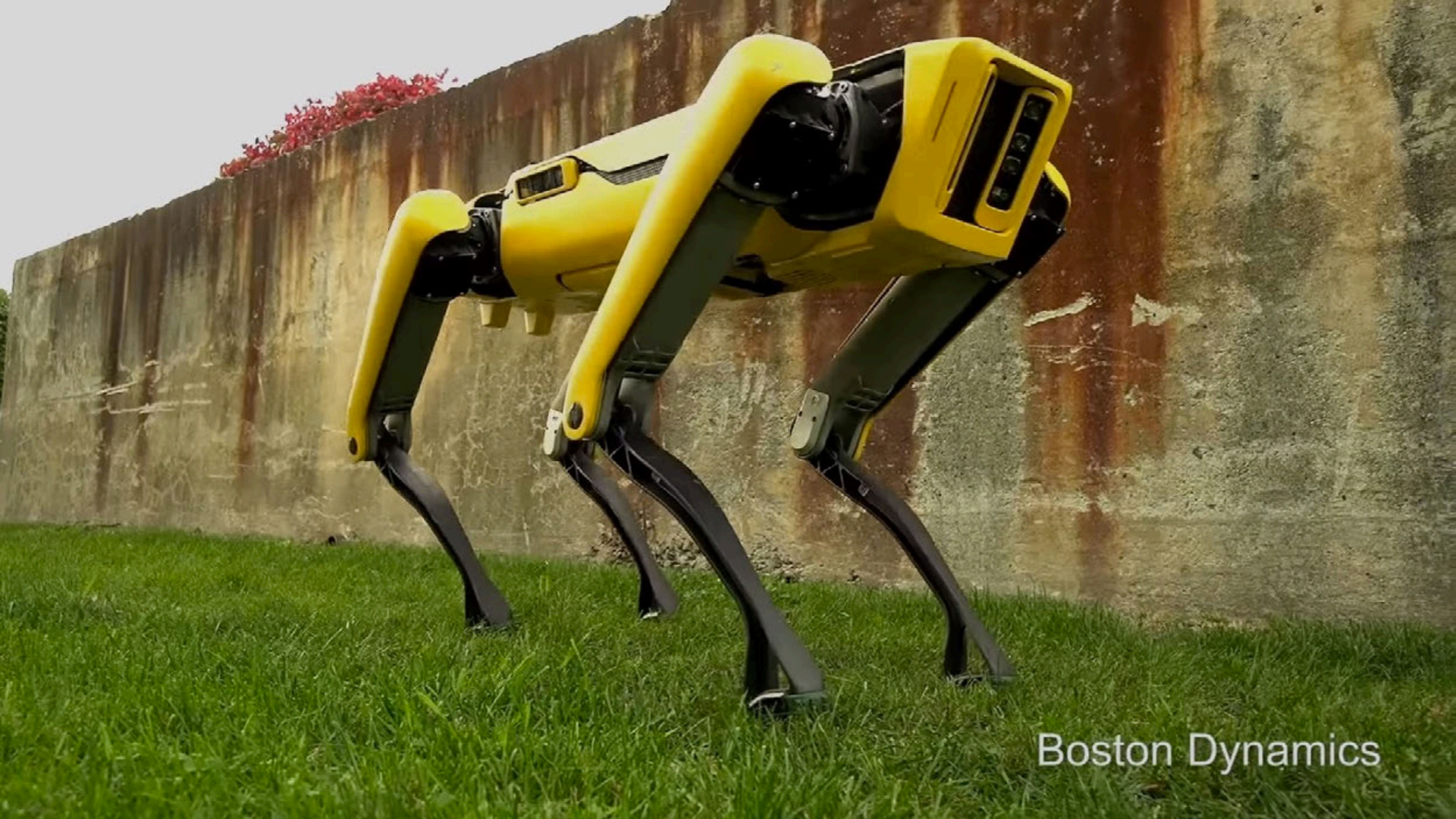
2016 DeepMind vs Lee Sedol



2017 OpenAI vs Dendi



DOTA 2



Boston Dynamics



Boston Dynamics

Neuralink



“Competition for AI superiority... most likely cause of WW3”
- Elon Musk

The future of work



Robots & Machines

McKinsey Finds Automation Could Eradicate a Third of America's Workforce by 2030

Up to 800 million jobs

SHARE



A new report by the McKinsey Global Institute suggests that 30 percent of jobs on



Brogrammer Jr.

**What Makes Us
Human?**

Creativity







SPARTAN TRIFECTA



Empathy





Genetic Counselor



Harvard Business Review

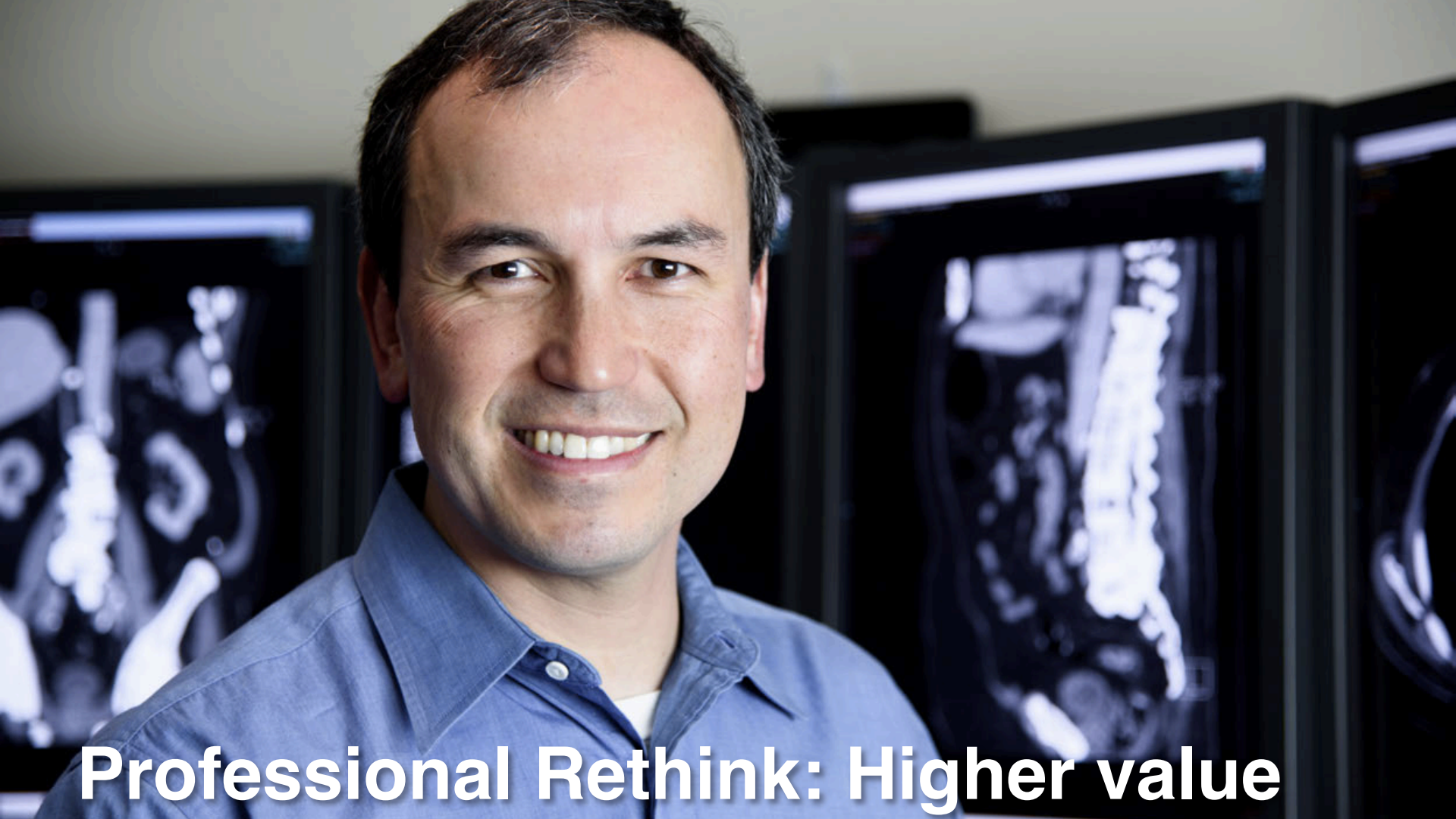
SKILL
BY OVERALL
RANK

	OVERALL	Clerical and administrative	Customer and client support	Design, media, and writing	Engineering	Finance	Health care	Hospitality, food, and tourism	Human resources	Information technology	Management and operations	Manufacturing and production	Marketing and public relations	Personal care and services	Research, planning, and analysis	Sales
Communication skills	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1
Organizational skills	2	3	3	4	3	3	2	2	2	3	2	2	2	2	2	3
Writing	3	6	5	1	2	4	3	4	5	2	3	3	3	4	4	4
Customer service	4	8	1	15	12	7	9	3	11	9	11	14	12	5	11	2
Microsoft Excel	5	2	9	9	8	2	12	16	3	10	6	6	5	16	3	9
Microsoft Word/Office	6	4	8	7	5	5	10	13	4	8	8	5	9	15	7	6
Problem solving	7	12	6	10	6	8	7	12	7	4	7	4	11	10	5	7
Planning	8	14	18	13	7	12	5	10	10	5	4	8	4	7	8	11
Computer skills and typing	9	5	4	17	10	10	4	8	12	24	14	7	17	9	16	8
Research	10	10	12	5	9	9	6	21	8	7	12	13	6	12	6	18

Our Future



Societal Rethink: Volunteerism



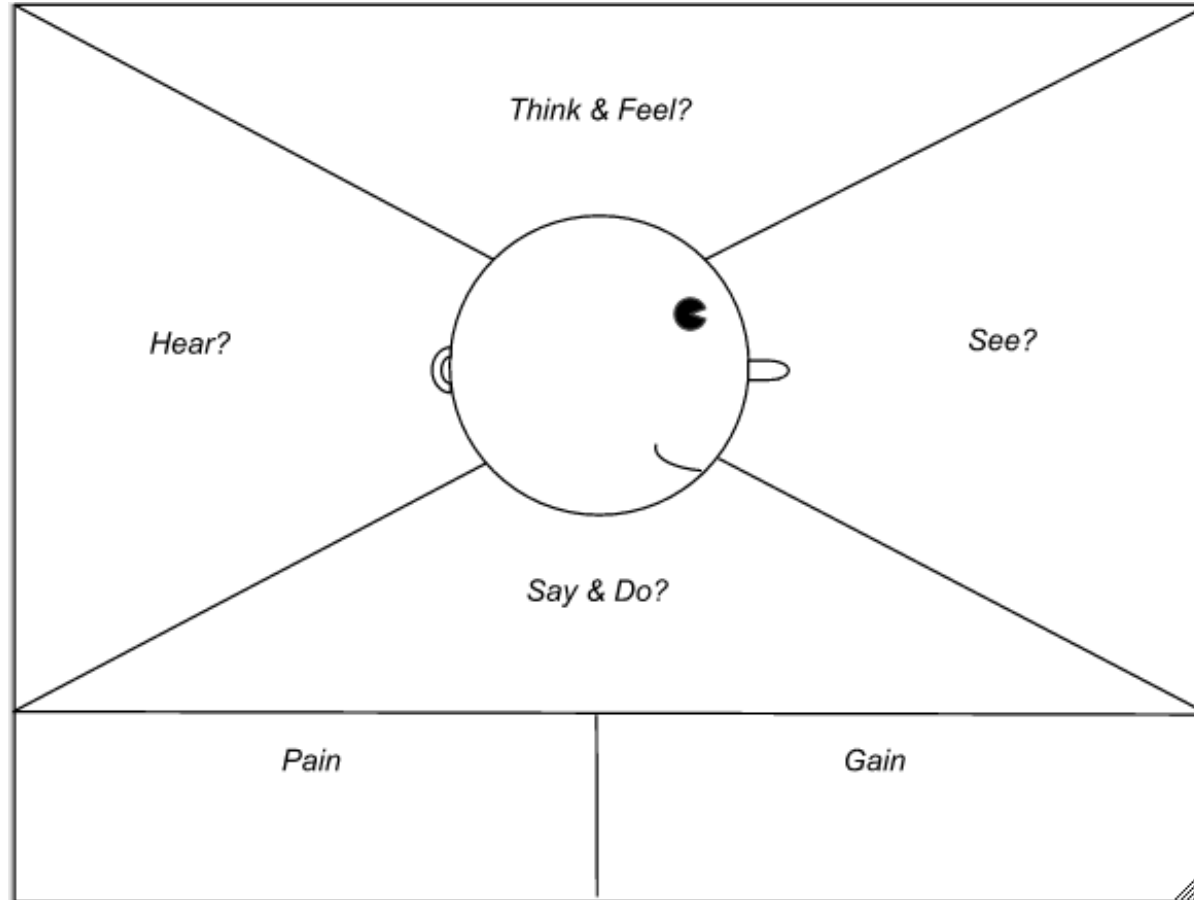
Professional Rethink: Higher value

LEMONADE + BAKE SALE



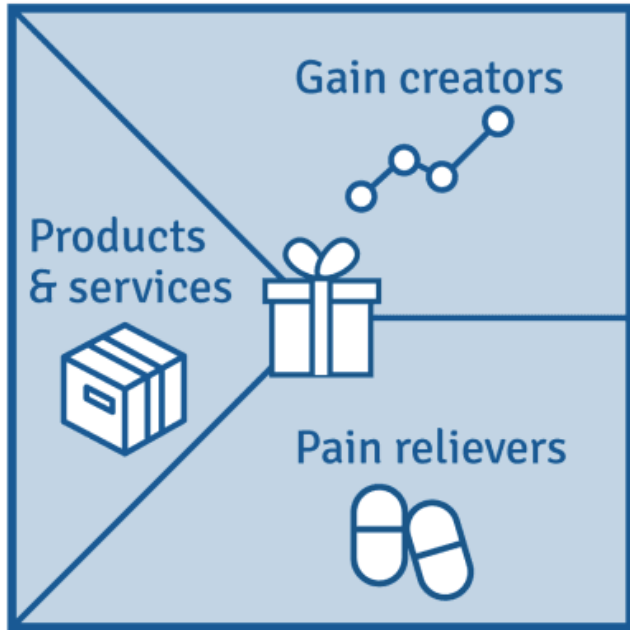
Be entrepreneurial... again

Empathy Maps

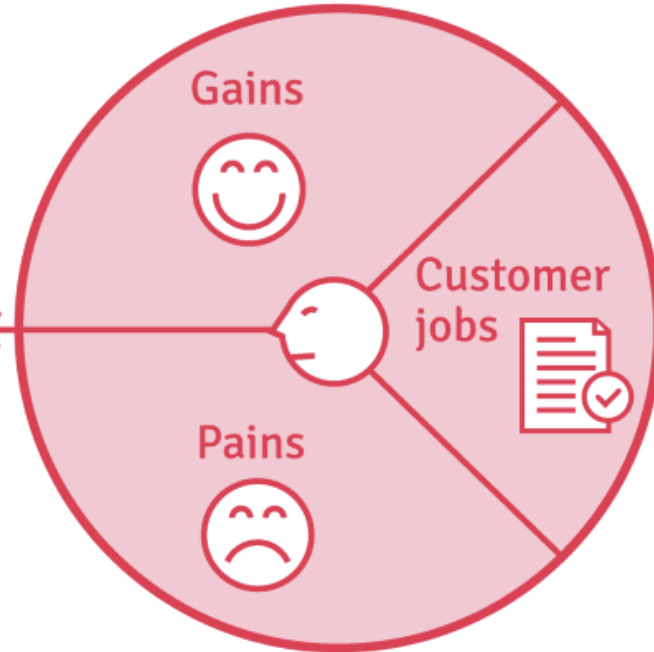


Value Proposition Canvas

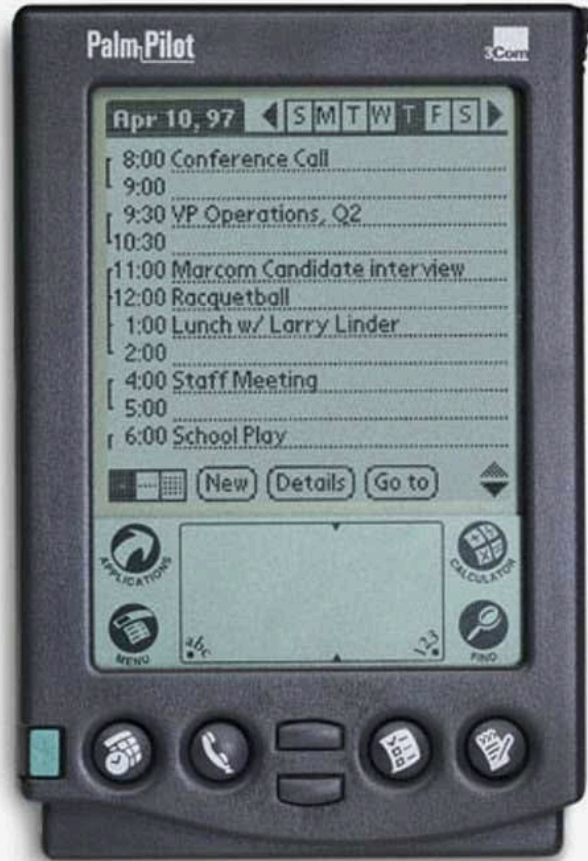
Value Proposition



Customer Profile



Learn Prototyping



Lo-Fi Prototype

The image shows a hand-drawn Lo-Fi prototype of a web browser window. The browser's address bar contains the URL 'http://www.goHairCut.com'. The page header features the 'goHairCut.com' logo on the left, the phone number '1-855-goHair1' and a 'Live Chat' button on the right. Below the header is a navigation menu with three buttons: 'New Appointment' (highlighted in blue), 'Change Appointment', and 'Profile'. The main content area is titled 'New Appointment' and contains a form with the following fields and options:

- Date: A text input with two slashes and a calendar icon.
- Time: Two spinners for hours (set to 10) and minutes (set to 30).
- Address: A dropdown menu showing '123 Denver St, San Jose' and a text input for 'or enter new address'.
- Type: A label with a question mark icon followed by three checked checkboxes: 'Mobile salon', 'Your premises', and 'Traditional salon'.
- Search: A 'Search Appointment' button.

Hi-Fi Prototype



Sketch³



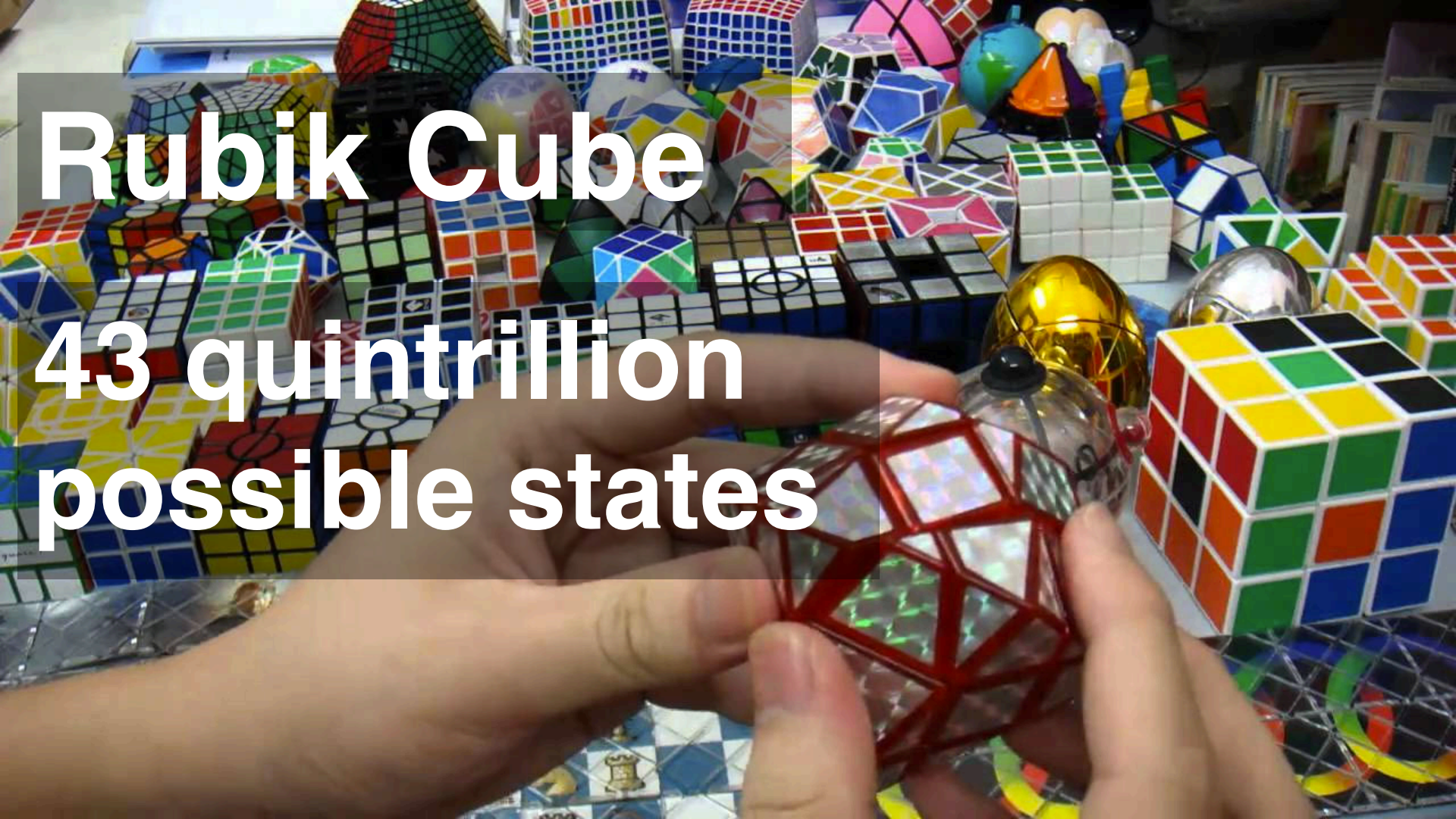
2018 Dota 5v5





Team Player

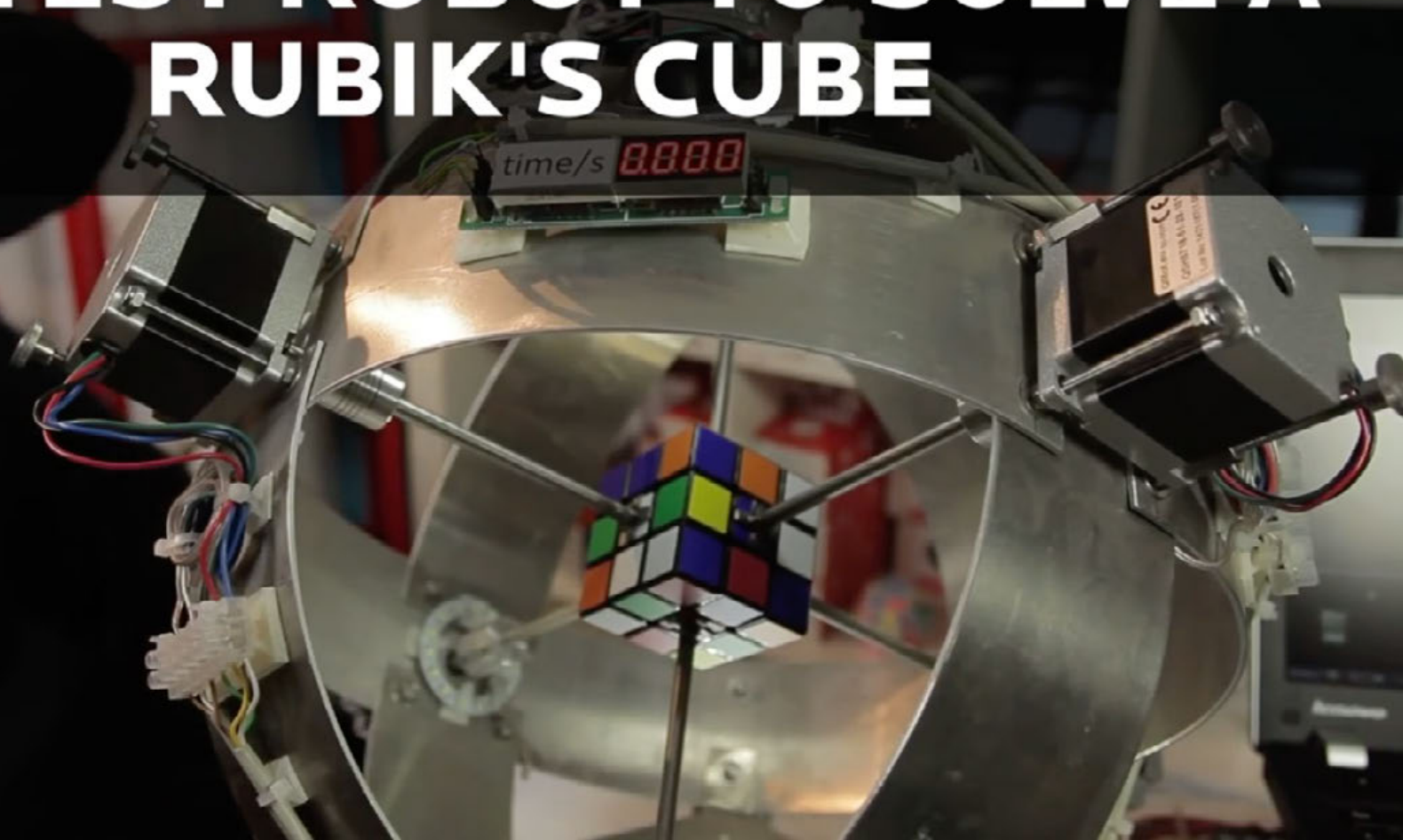
One more thing...



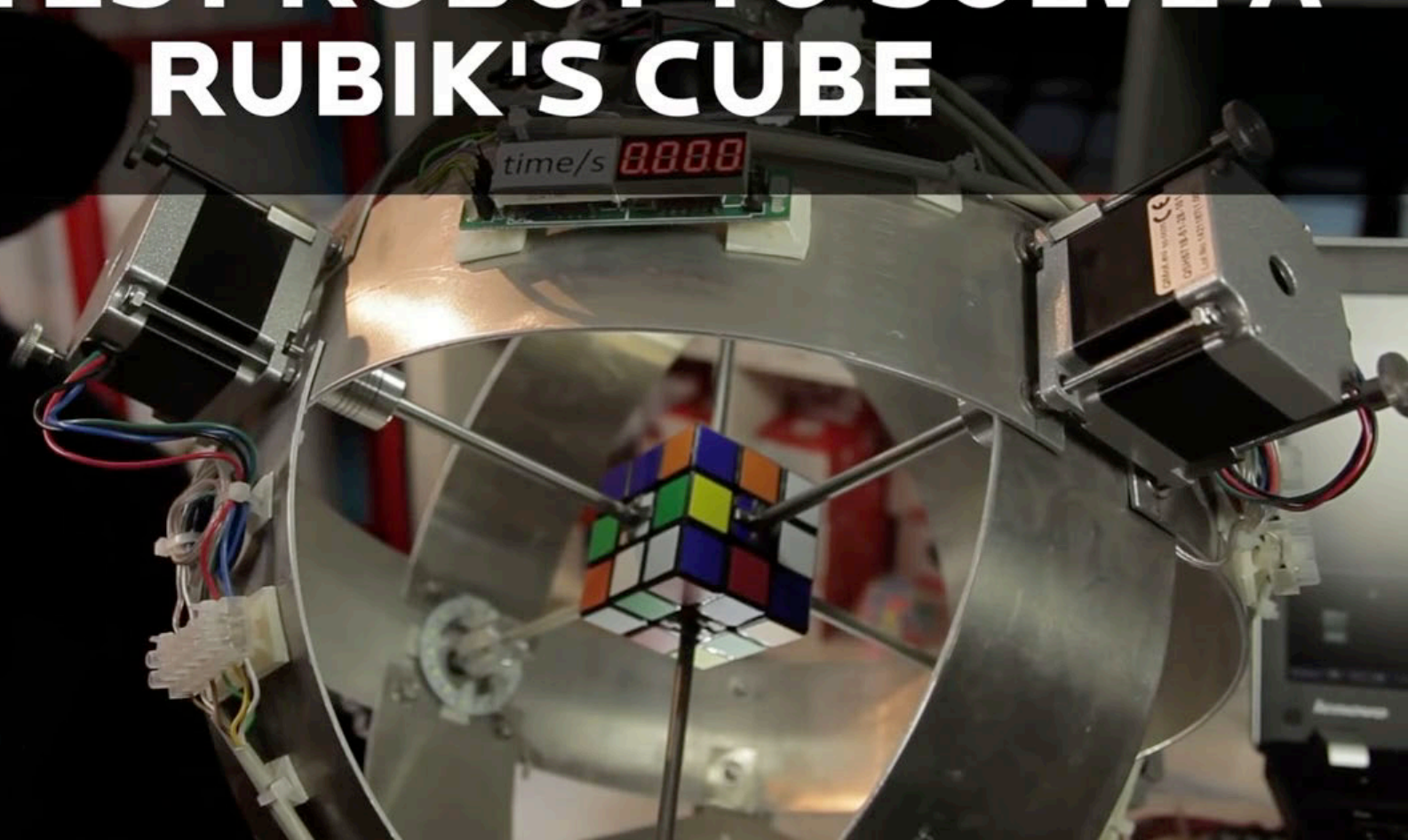
Rubik Cube

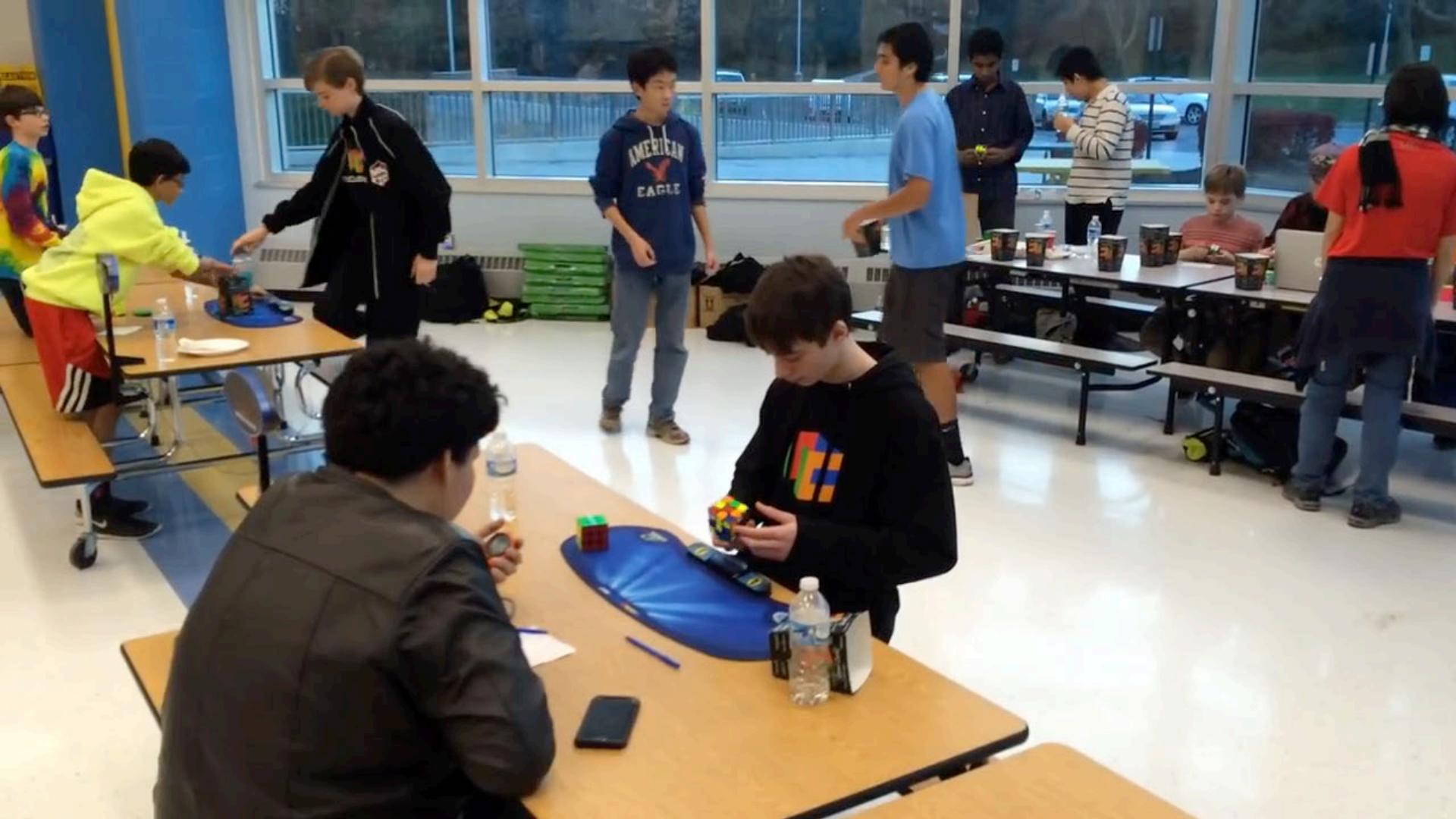
**43 quintrillion
possible states**

FASTEST ROBOT TO SOLVE A RUBIK'S CUBE



FASTEST ROBOT TO SOLVE A RUBIK'S CUBE





A sunset over a beach with a small white and blue robot on the sand. The sun is low on the horizon, casting a golden glow over the water and sand. The robot is positioned in the lower-left foreground, looking towards the ocean. The text "Thank you" is centered in the middle of the image.

Thank you

Eddy Lee, PhD
eddy@coffeerc.com