

Beca Tech Drop

TRENDING TECHNOLOGY AND HOW IT MIGHT IMPACT US



Vaughan Robertson - Bio

- Group Manager - Technology Strategy
- Line of Business Software Management/Consolidation
- Strategic ICT Supplier Relationships
- Designated Futurist (Technology Agitator)

- (.....Change Junkie!)

Why should we care about “Disruptive Technology?”



Recognise these?



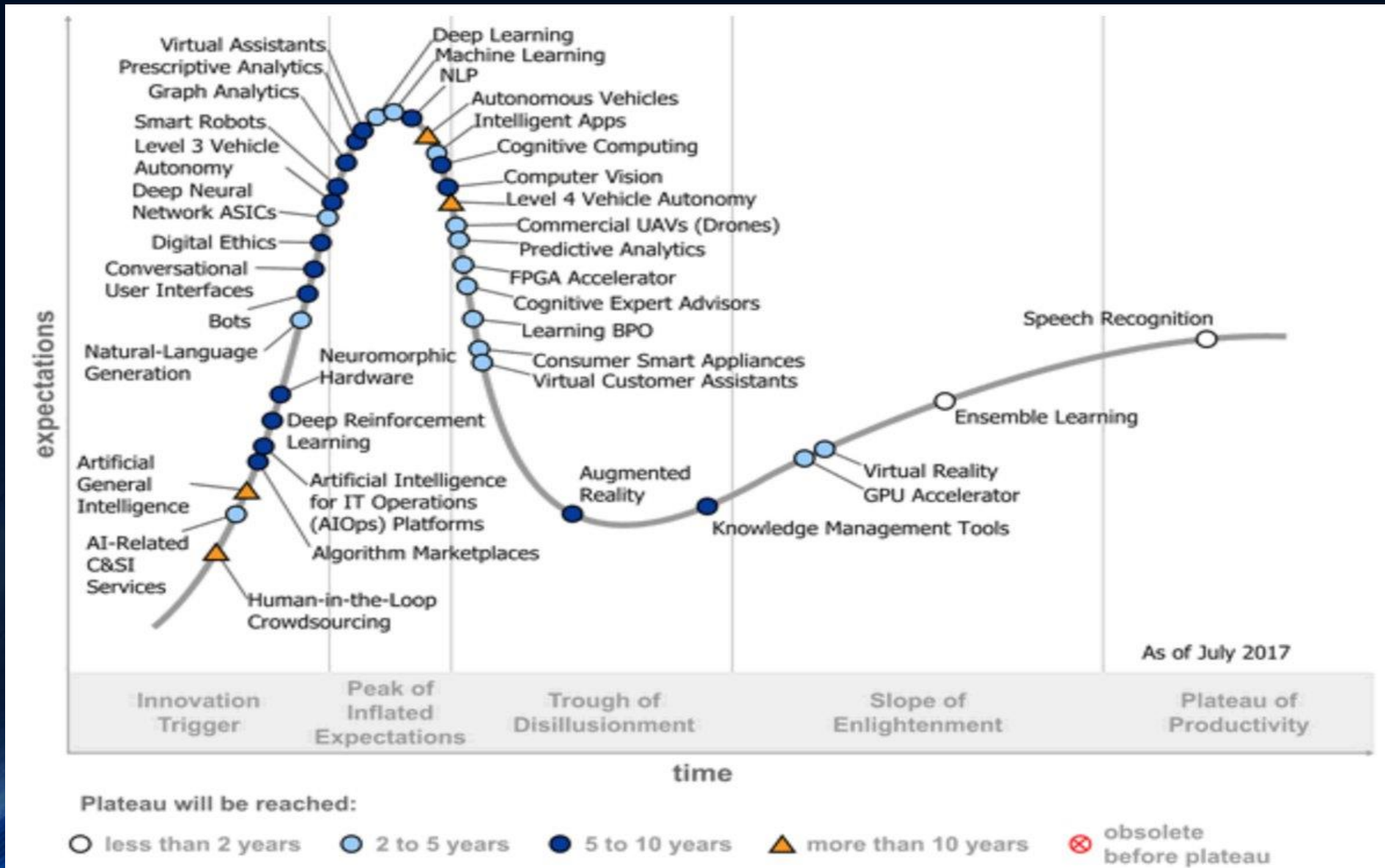
It's happening all over.....

Digital is the main reason just over half of the **companies** on the Fortune 500 have **disappeared** since the year 2000

Pierre Nanterme
CEO of Accenture



Gartner 2017 Hype Cycle for Emerging Technologies



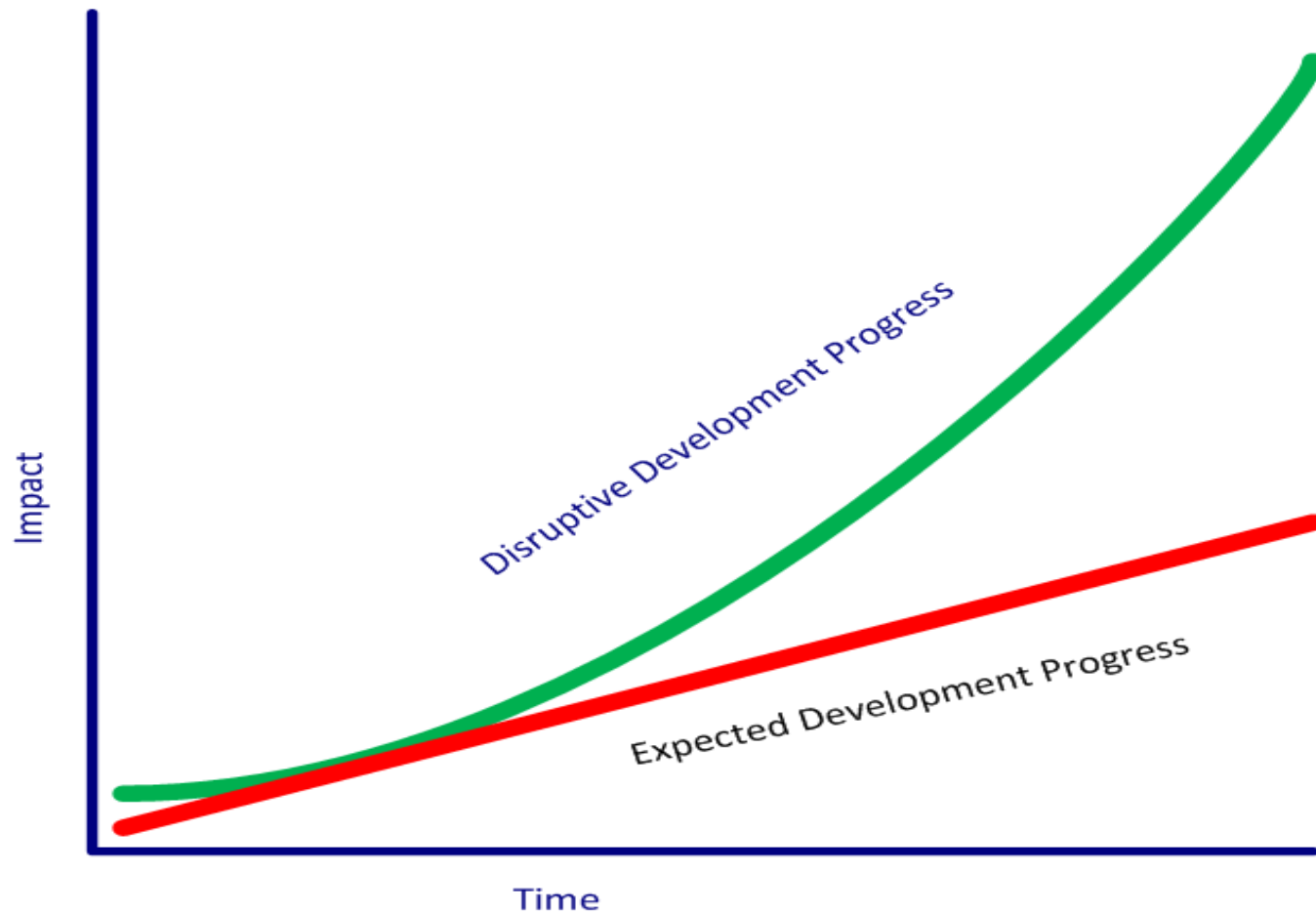
Technology Disruption Areas

- Mobile
- Wearables/ Alternate UIs
- Internet of Things
- 3D Printing
- Social/ Crowdsourcing/ Shared Economy
- Engineering
- Energy
- Nano Materials/ Graphene/ Carbon Nanotubes
- Drones/ UAV
- Smart/ Autonomous Vehicles
- Smart Homes/ Buildings
- Robotics
- Security/Blockchain
- Medical/Health
- Augmented/Virtual Reality
- Cognitive Augmentation
- AI/Machine Learning
- Developing Innovation

Qualifiers – Points to Note.....

- Timeframes are critical – and very hard to pick
- Watch the intersections
- Some sources are more reliable than others
- New technology is not necessarily disruptive
- It might not be real... check and corroborate

Predicting Disruptive Technology



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Amazon GeniCan



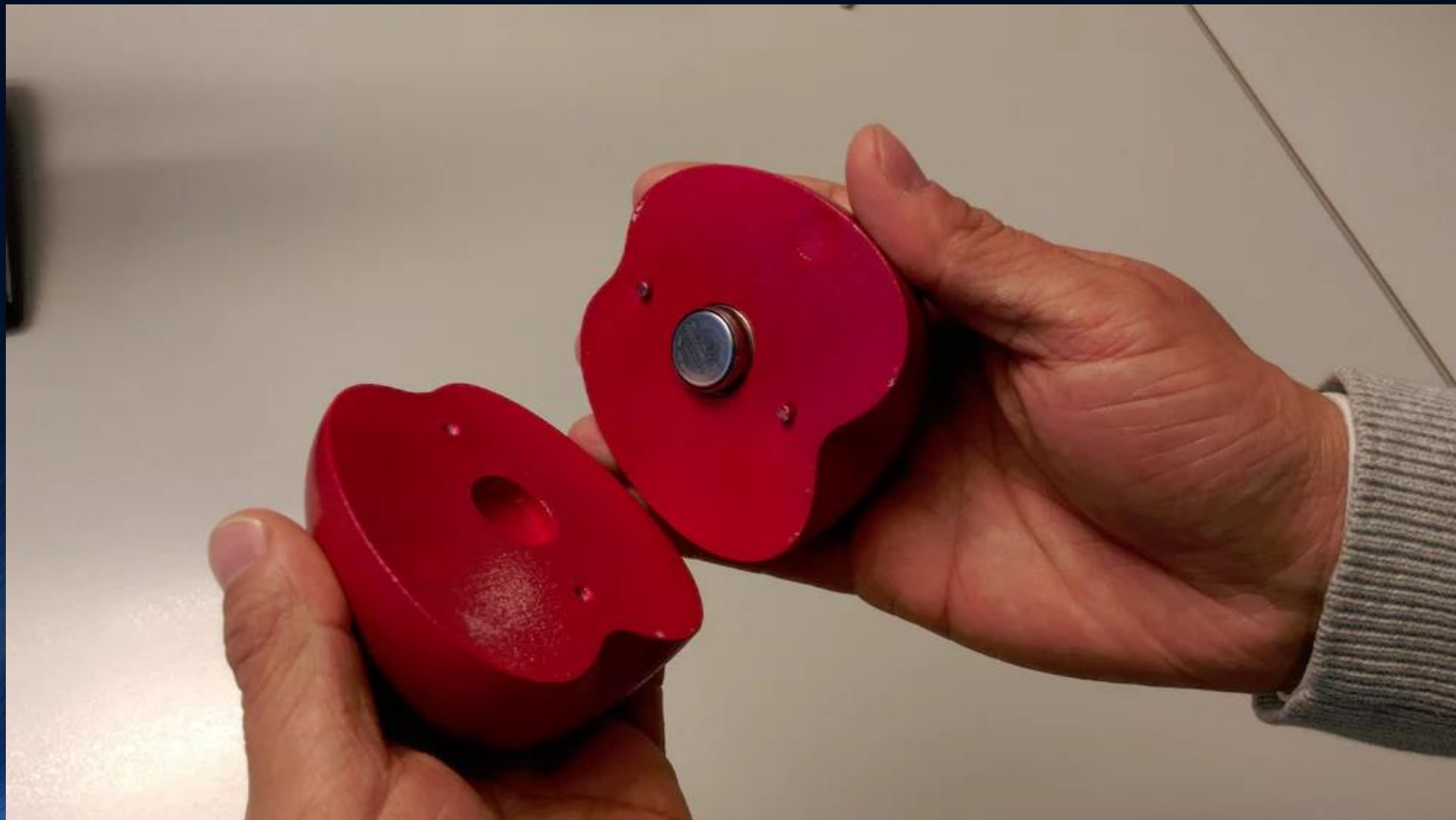
Peggy – Connected Clothes Peg



RoboMussels



EMPA Fruit-mimicking sensors



Mouthguard detects concussion in real-time



Social - Pigeon Air Patrol





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3D Printed Titanium Bike Parts



3d Printed Buildings – becoming Chic



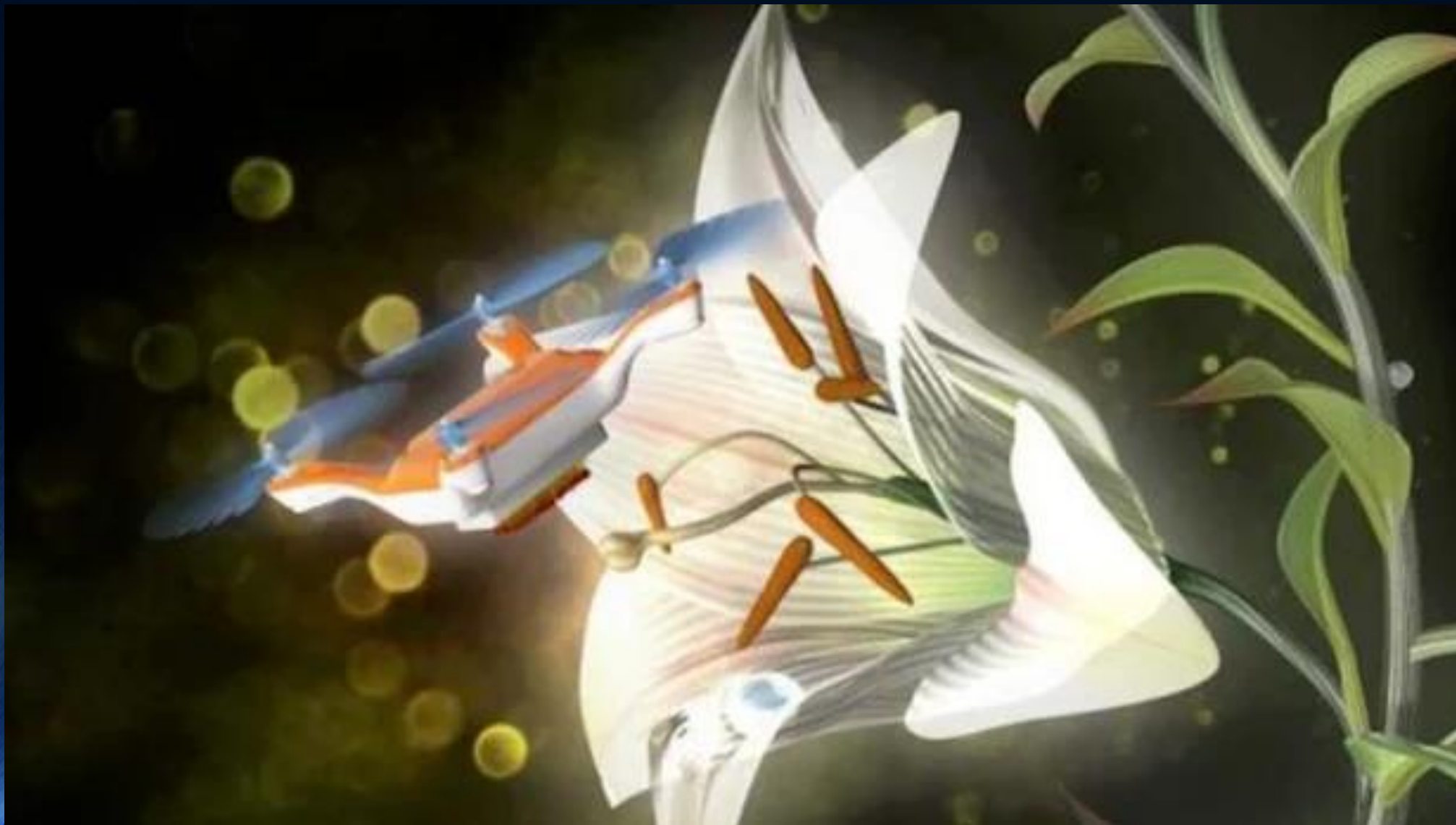
3D Printed Wood – not quite, but close



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Drones to Pollinate Plants



What could possibly go wrong....?



6:25 58
CBS 2
@CBS2

VE ACTIVISTS  SPEAKING AT CONSERVATIVE POLITICAL ACTION CONFERENCE, VICE PRESIDENT MIKE PE

You just never know when.....?



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DAQRI Smart Helmet



Six Flags Mixed Reality Roller Coaster



Augmented Reality Locked States

- World-Locked
- Body-Locked
- Head-Locked



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FlipFlic Automates Existing Blinds



Amazon Echo/Dot... with Alexa



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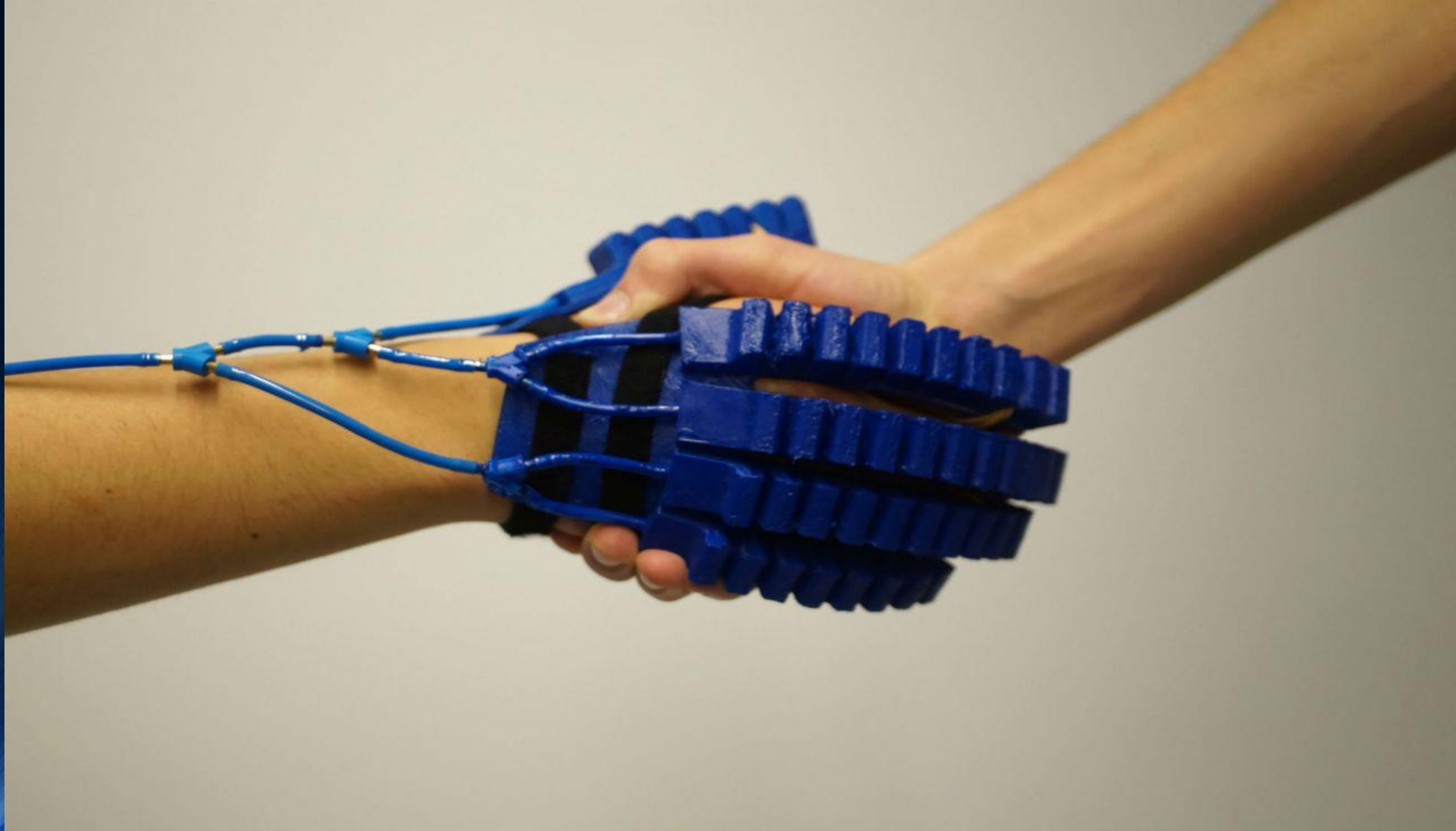
Boston Dynamics - Handle





Boston Dynamics

Soft Robotics



GLAUCUS

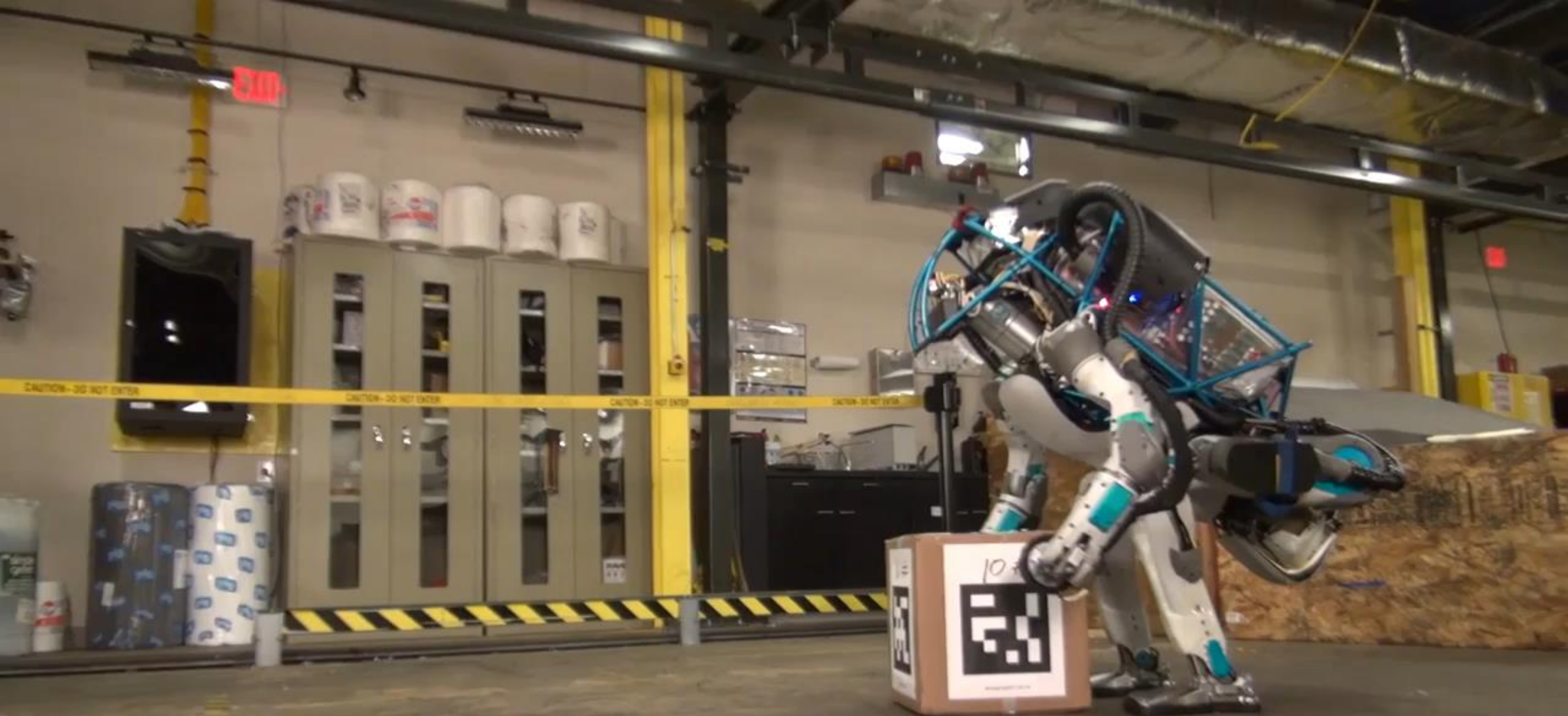


Isaac Asimov's "Three Laws of Robotics"

- A robot may not injure a human being or, through inaction, allow a human being to come to harm.
- A robot must obey orders given it by human beings except where such orders would conflict with the First Law.
- A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.

Boston Dynamics - Atlas



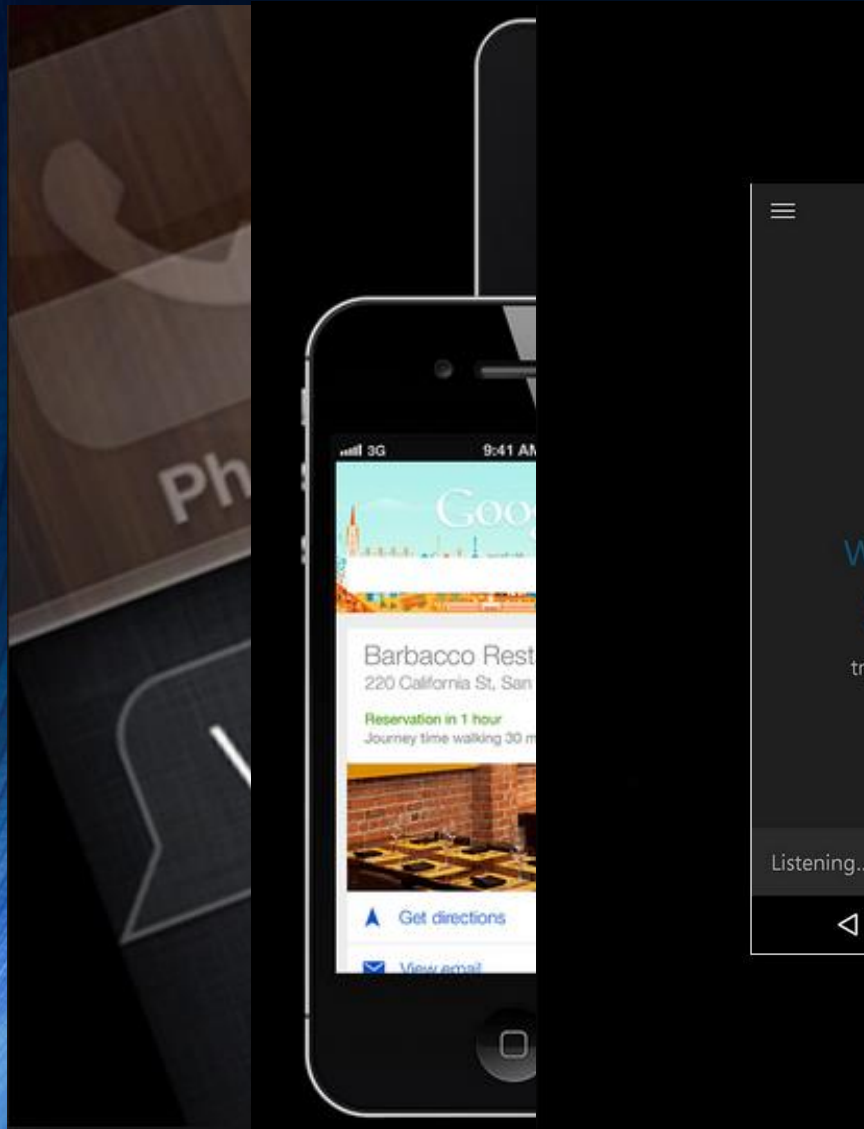


Boston Dynamics

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Siri, Google Now, Cortana... et al



The image is a composite showing a smartphone screen on the left and a natural language processing diagram on the right. The smartphone screen displays a weather forecast for the Golden Gate Bridge. The text on the screen reads: "Will it be warmer than 70 degrees near the Golden Gate bridge after 5 pm the day after tomorrow? No, it won't be that warm Wednesday after 5pm". Below this is the weather for the Golden Gate Bridge: High 67°, Low 53°, Wind Light, 11 mph, Humidity 76%, and Rain 0%. A hourly forecast table follows:

5 PM	6 PM	7 PM	8 PM	9 PM	10 PM
64°	62°	60°	58°	57°	57°
2%	2%	2%	2%	3%	3%

The diagram on the right, titled "Natural language input", shows the sentence "Will it be warmer than 70 degrees near the Golden Gate bridge after 5 pm the day after tomorrow?" being processed. It highlights various components: "70" as a value, "Golden Gate bridge" as a location, "after 5 pm the day after tomorrow" as a time period, and "Will it be warmer than" as a query. The diagram uses colored boxes and arrows to show the flow of information from the input sentence to the final answer on the phone.

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Artificial Intelligence – Some Current Applications

- Photo Classification
- Real-time Facial Recognition
- Transportation Optimisation Data Analysis
- OCR (Optimal Character Recognition)
- Email Spam Filtering
- Topic Spotting (News clipping)
- Language Translation
- Weather Prediction
- Medical Diagnosis

IBM Watson – Jeopardy! Champion



“It is not the strongest of the species that survive, nor the most intelligent, but the one most responsive to change...” - Charles Darwin

In conclusion ...again... Why should we care?"





T- 00:00:03

STAGE 1	TELEMETRY
SPEED	ALTITUDE
00000 km/h	00.0 km

UPCOMING LIFTOFF

STARTUP
THE FALCON 9 FLIGHT COMPUTERS
HAVE TAKEN CONTROL OF THE
COUNTDOWN

LAUNCH: BULGARIASAT-1

STARTUP MAX-Q STAGE 1 ENTRY BURN SECOND STAGE ENGINE CUTOFF SECOND STAGE ENGINE CUTOFF

SPACEX

Thank you...

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