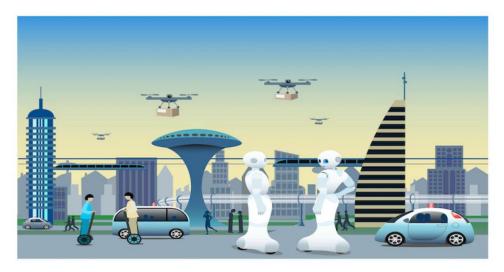
A few Introductory Videos CENG 5437 1/18/2023



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When I picked up my car in Munich and toured the facilities, the research building was the largest o	of
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Center for Robotics Software YouTube Some of our work at UHCL

Tracking Control; Gesture Control, CRS Kickoff, NASA Swarmathon, Brain control of Baxter

https://www.youtube.com/channel/UC_PHhwvgJ6AHIF_kN4o1JQw/videos?shelf_id=0&sort=dd&view= 0

Active Tracking Control of Bebop Quadcopter

Baxter Controlled through EEG

Leap Motion Control of Bebop (Houston Robotics Day 2018)

University of Houston Clear Lake and San Jacinto College

Swarmathon

Swarmathon: A Swarm Robotics Experiment For Future Space Exploration

> Luong Nguyen, Thomas L. Harman, Carol Fairchild Computer Engineering Department University of Houston Clear Lake Houston, Texas

Dr. Nguyen's Team the Winners



SWARMATHON

• Swarmathon is a cooperative agreement between the NASA Minority University Research and Education Program (MUREP) and the University of New Mexico in partnership with the NASA KSC Swamp Works.







University of Houston 🔁 Clear Lake

Aquanaut: The Transformer Under the Sea - Houston Mechatronics Story 27,364 views •Mar 6, 2020 8:15

https://www.youtube.com/watch?v=cdc5mQcJlqY

Houston Mechatronics has built the Aquanaut, a transforming all-electric undersea vehicle. This untethered and Al-enabled vehicle is capable of efficient, long-distance transit and data collection in 'AUV' (autonomous underwater vehicle) mode. After transforming into 'ROV' (remotely operated vehicle) mode, the head of the vehicle pitches up, the hull separates, and two manipulator arms are activated allowing Aquanaut to accomplish advanced subsea operations. Watch how electronics powers this unique transformer under the sea. Be sure to subscribe to the Altium Stories channel to stay updated on new videos. Altium LLC is accelerating the pace of innovation through electronics. From individual inventors to multinational corporations, more PCB designers and engineers choose Altium software to design and realize their ideas.

https://www.youtube.com/watch?v=4rJmF7xbQPI 3:22



Houston Mechatronics Rebrands As Nauticus Robotics

Published: Dec. 1, 2021 at 7:05 AM CST

WEBSTER, Texas, Dec. 1, 2021 /PRNewswire/ -- Houston Mechatronics, Inc., an offshore robotics firm based in Webster, Texas, is excited to announce the completion of a company-wide rebranding effort. Houston Mechantronics — or "HMI" to many in the industry — will assume a new visual identity and do business going forward as **Nauticus Robotics, Inc**.

"The name Nauticus Robotics makes clear our commitment to the blue economy," said Nicolaus Radford, the company's founder and CEO. "Our mission is to grow that economy through sustainable robotics that deliver value while protecting our planet's most valuable resources. This rebrand aligns us with that goal and positions us as a leader in our space."

In addition to the name change, the company has launched a new website at <u>www.nauticusrobotics.com</u>. (Our Interns have worked there.)

Flying Taxi

EHang, to make safe, autonomous, and eco-friendly air mobility accessible to everyone.

16,000 views •Apr 22, 2020 3:09 This was neat at the Consumer Electronics Show in Vegas

https://www.youtube.com/watch?v=ugkVrrr8I-4

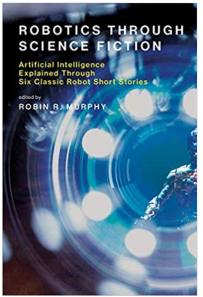
Robots 2020 Corona Disaster Misc

Robots join the frontline fight against coronavirus

46 views •Jul 23, 2020 2:24

https://www.youtube.com/watch?v=DU3m1Jp60-c

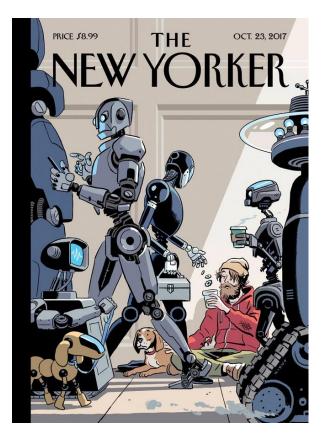
Disinfecting robot by Fetch Robotics, BWR and Albuquerque 1400 views •Jun 18, 2020 0:38 https://www.youtube.com/watch?v=ntvhII_EjzA&goal=0_da1848e85b-dab8ed1575-510175705&mc_cid=dab8ed1575&mc_eid=5acf01a803 **Robotics Through Science Fiction: This is a good read.**



Artificial Intelligence Explained Through Six Classic Robot Short Stories (The MIT Press) Paperback – Illustrated, December 25, 2018

by <u>Robin R. Murphy</u> (Editor)

Will future robots & AI take over? New Yorker Cover



If HAL9000 was Amazon.com's Alexa

245,164 views •Jan 9, 2018 I share his pain!

https://www.youtube.com/watch?v=JepKVUym9Fg

2001 <u>https://www.youtube.com/watch?v=dSIKBlibolo</u>

Mobile Robots in Business at UH



https://dineoncampus.com/uh/starship-delivery-robots

Video 1:02

At Your Service: Hilton College Rolls Out First Restaurant-based Food Delivery Robot in Houston

https://www.youtube.com/watch?v=rrrGFNrzO7w

Amazon Warehouse Order Picking Robots

2:44

https://www.youtube.com/watch?v=Ox05Bks2Q3s

TUG in Hospitals 1:49

https://www.youtube.com/watch?v=WafkcuhTtMc

Google's NURO 0:59

https://www.youtube.com/watch?v=0xZsvs8iG0Q

Self-driving robots deliver packages for e-commerce giant in Beijing 19:42

https://www.youtube.com/watch?v=zZtOuXjtYYE

Domino's Using a Robot to Deliver Pizza in Australia - IGN News 1:10

https://www.youtube.com/watch?v=Y2j6m83LU7k

Tired of Carrying Your Luggage?

Robots Take Over Luggage Duties at Sheraton Los Angeles SanGabriel [Aethon TUG]6:26(NASA KSC Project)

https://www.youtube.com/watch?v=bsXRfZPo3Mw

Let Your Suitcase Do the Driving 5:32

https://www.youtube.com/watch?v=EpiY4Efnq8U

Self Driving – Good and Bad

BMW Self Riding Motorcycle 3:15 Weird?

https://www.youtube.com/watch?v=XMuMoZIVYqs

Aptiv Lyft BMW Self Driving Car at CES 20182:20

https://www.youtube.com/watch?v=L5Fq27QrZM8

Volvo plows into pedestrians during safety demo 1:49

https://www.youtube.com/watch?v=WbW2UgmjJUA

Tesla Driver Killed In Crash With Autopilot System Driving 2:37

https://www.youtube.com/watch?v=s8AHzY7xr10

Automated Driving with ROS at BMW ROSCon 2015 Hamburg Day 2 Michael Aeberhard 28:30

https://www.youtube.com/watch?v=z9WzHXfYqFI

Munich. With the FIZ Projekthaus Nord, which went into operation today, the BMW Group is opening the new heart of its global research and development network. The architecturally impressive building complex makes the successively expanded Munich Research and Innovation Centre (FIZ) one of the largest R&D locations in Europe and manifests the clear commitment to Germany as a location for research and development. The FIZ Projekthaus Nord is a milestone of the long-term "FIZ Future" program, in which the company has already invested about 1 billion euros.

https://www.press.bmwgroup.com/global/article/detail/T0317727EN/building-for-the-future:bmw-group-enters-a-new-era-of-r-d-with-fiz-nord?language=en



When I picked up my car in Munich and toured the facilities, the research building was the largest of the complex! (TLH)

Top 10 mobile robotic stories of December 2021 – A read to be updated later

https://mobilerobotguide.com/2021/12/29/top-10-mobile-

robotic-stories-of-december-2021/



5 Cool Robots Of Future Technology You Must Have Soon

https://www.youtube.com/watch?v=bqR_8BXitFQ

Melonie and Fetch 5:02 (She sold her company for BIG BUCKS!!