



AI LAB AT URI LIBRARIES

KARIM BOUGHIDA

@KBOUGHIDA

DEAN OF URI LIBRARIES

CNI FALL 2017 MEMBERSHIP MEETING

DECEMBER 11-12, 2017 WASHINGTON, DC

#CNI17F

#AILIB¹



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THE
UNIVERSITY
OF RHODE ISLAND
COLLEGE OF
BUSINESS
ADMINISTRATION



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INNOVATION CLASSES

TAKE A JOB | MAKE A JOB

BUS 247 • Business of Innovation: the Design Process • T, W, F • 11AM-3PM • 3 Credits

Creativity meets business. Learn practical skills that promote efficient and effective creative process, develop your concepts through sketching, design thinking, storyboards, and mindmaps to discover creative strategies and achieve problem solving solutions for either entrepreneurship or intrapreneurship. Experience hands-on visual activities to nurture a growth-mindset, expand frontiers of innovation, and strengthen imagination.

The logo for 'dataspark', with the word in a bold, blue, lowercase sans-serif font. Above the 'a' in 'spark' is a stylized sunburst graphic with several orange and yellow rays.

URI SPARC



WHAT IS AI?
[PUT YOUR OWN DEFINITION]

WHAT IS DATA SCIENCE?
[PUT YOUR OWN DEFINITION.
NSF IS FUNDING ITS
SCHOLARSHIP]

WHY AI?

TIME
SPECIAL EDITION

Artificial Intelligence

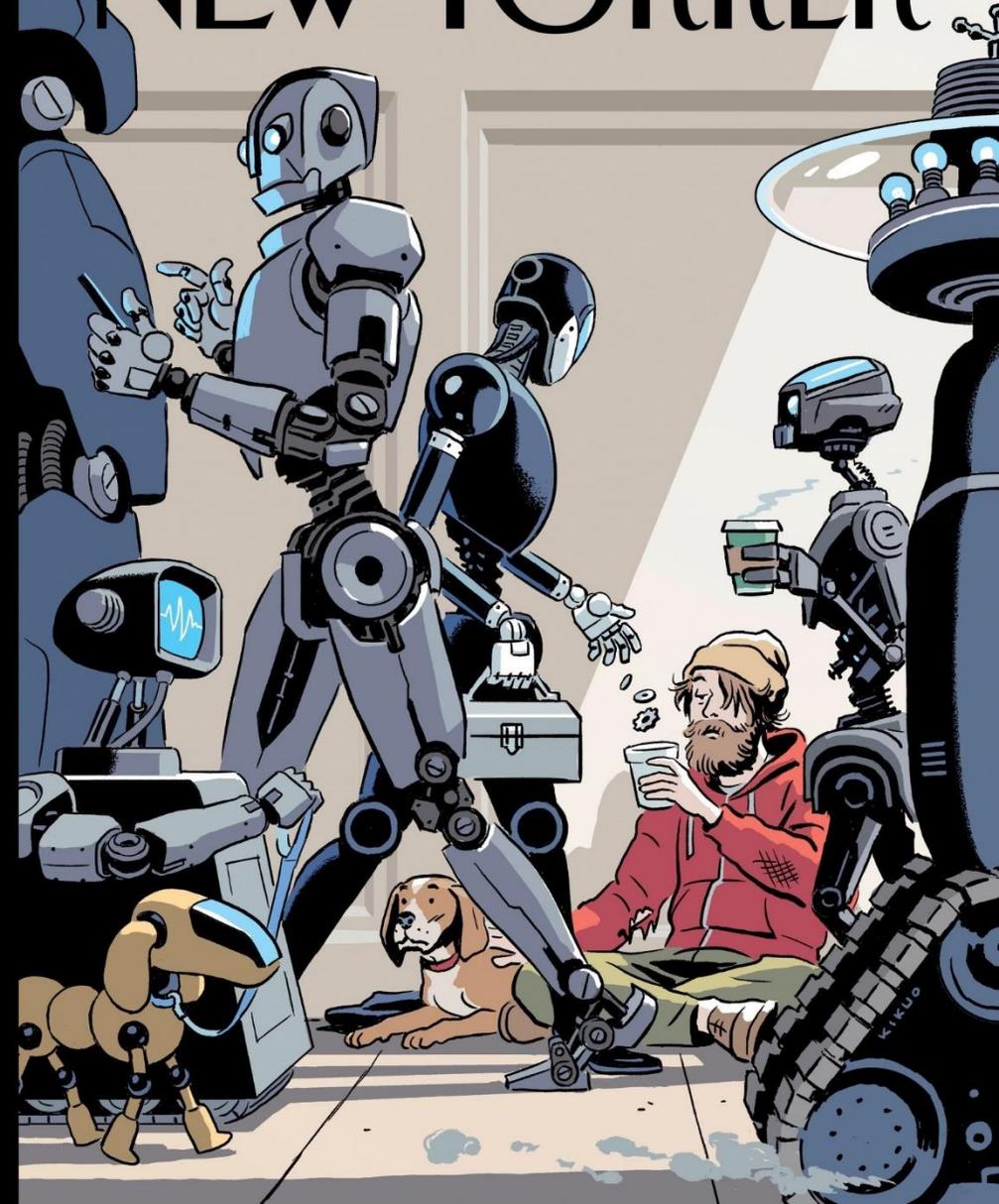
The Future of Humankind



PRICE \$8.99

THE NEW YORKER

OCT. 23, 2017

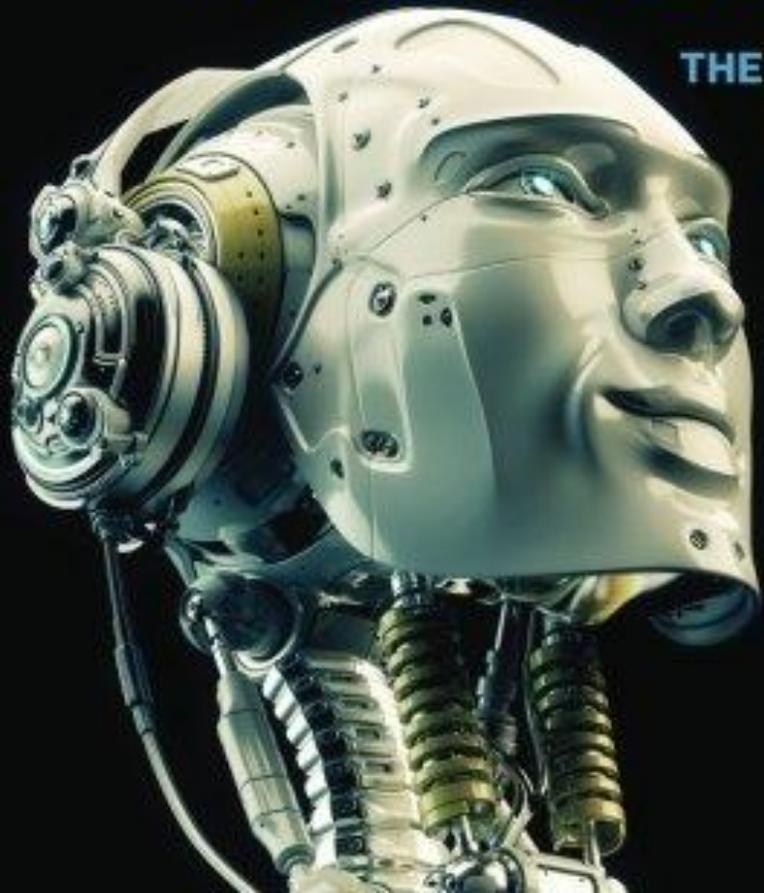


FEATURING: MACHINE LEARNING > DRIVERLESS CARS > SUPERHUMANS

POPULAR SCIENCE

SPECIAL EDITION

THE NEW ARTIFICIAL INTELLIGENCE



THE FUTURE OF
NANOBOTS

DETECTING
CANCER

KILLER
ROBOTS?



The
Economist

JUNE 25TH - JULY 1ST 2016

Inside China's Ministry of Truth

Trump in trouble

Who are the Niger Delta Avengers?

The flaws in executive pay

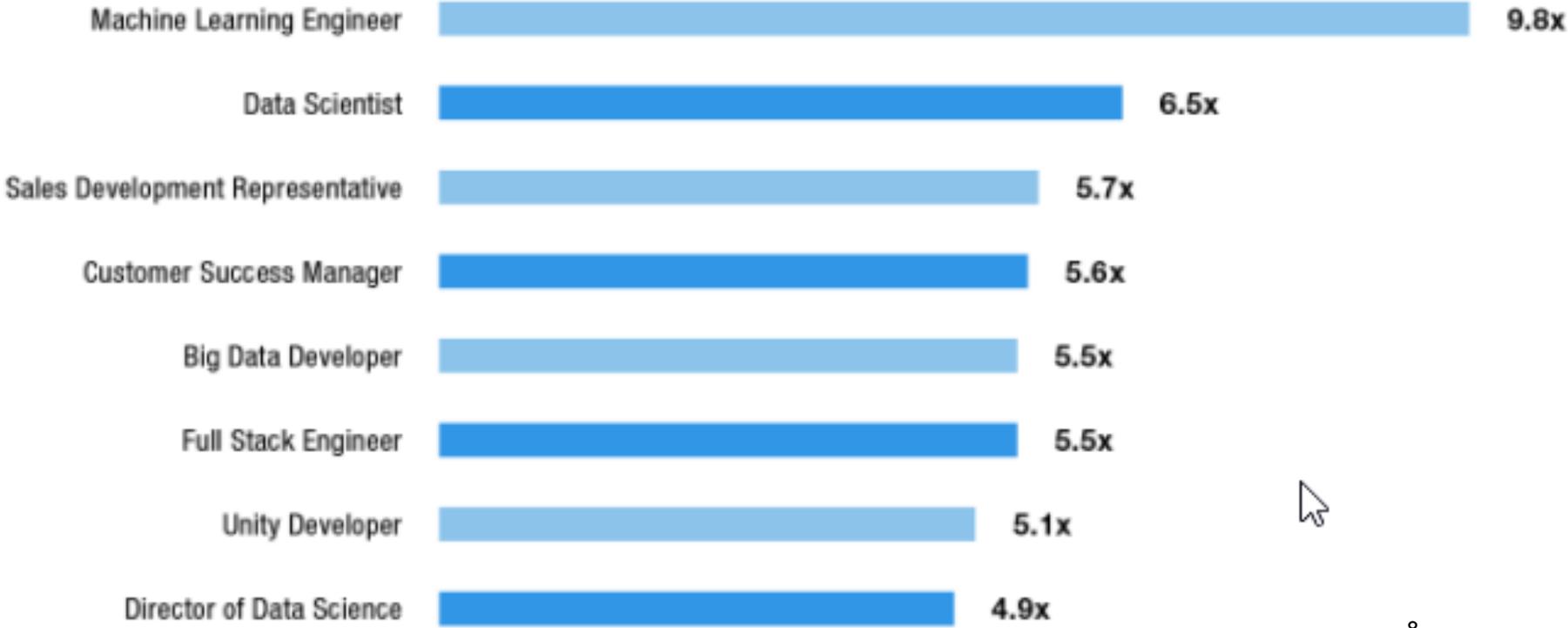
Motorcycles that fly

March of the machines

A SPECIAL REPORT ON ARTIFICIAL INTELLIGENCE



Top 20 Emerging Jobs





THE PUBLIC (2018)

THE LIBRARY IS THE LAST BASTION OF DEMOCRACY



URI STUDENTS REQUESTED AI COURSES



NEWS, SCIENCE & RESEARCH

University struggles to keep up as AI industry booms

Recent changes have led to ballooning course enrollment, evolving sabbatical system

By **JONATHAN DOUGLAS**

SENIOR STAFF WRITER

Tuesday, November 7, 2017



**LIBRARY AND AI?
[JUST HIGHLIGHTS NO
LITREVIEW]**



When Robots Join the Library

18,393 views

👍 75

🗨️ 3



Wall Street Journal ✓

Published on Sep 29, 2014

Connecticut's Westport Library recently acquired two robots, Vincent and Nancy, that will be used to help teach coding and computer-programming skills. Photo: Danny Ghitis

Meet Hugh, the robot librarian

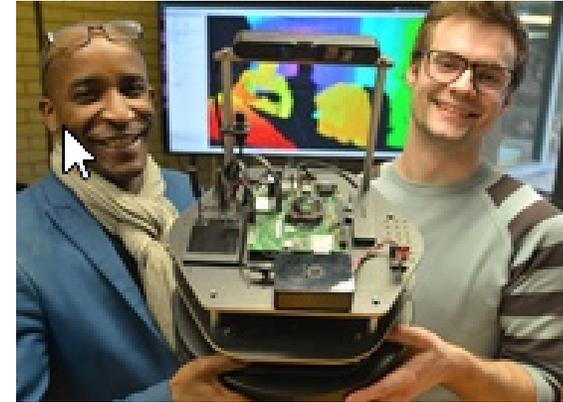
26 February 2016

 Share

Students searching for library books at Aberystwyth University could soon be turning to a robot for assistance.

Hugh, the artificially intelligent robot librarian, is the brain-child of robotics students Pasi William Sachiti and Ariel Ladegaard.

Designed to take verbal book requests, Hugh will be able to tell where a



thursday, march 30, 2017

B305: AI, Robots, & Biometric Systems

3:45 p.m. - 4:30 p.m.

Qaddafi Sabree, Chairperson, Emerging Technologies Committee of the District of Columbia Library Association (DCLA)

Scott Harkless, Librarian Associate, Emerging Technologies Committee of District of Columbia Library Association (DCLA)

Angela Forest, Archival & Records Consultant, Emerging Technologies Committee of District of Columbia Library Association (DCLA)

Ernie Dixon, Web/Technologies Librarian, Paul Sawyer Public Library

Rob McCoy, IT Manager, Paul Sawyer Public Library

Feral Librarian

Research libraries & higher education. Sometimes music, sports, & other stuff.

[Blog](#)

[About Chris](#)

[Publications and presentations](#)

← [Serendipity as prick](#)

Carla Hayden's m

What happens to libraries and librarians when machines can read all the books?

© Published [March 16, 2017](#) Library stuff [11 Comments](#)

Tags: [AI](#), [future of libraries](#), [machine learning](#), [technology](#)

And one concern I think is very important to take seriously is the reality that without explicit counter-measures, machine learning & AI will re-inscribe & magnify existing systems of inequality and racism, sexism, homophobia and the like.

White People Are Upset That Amazon's Alexa Believes Black Lives Matter



Michael Harriot

Friday 3:31pm • Filed to: NEWS ▾

 256.7K

 271

 35





Charleston Conference

ISSUES IN BOOK AND SERIAL ACQUISITION

November 6 - 10, 2017

[Area Maps and Floorplans](#) | [Shuttle Routes](#) | [Session Formats and Threads](#)

[Schedule](#) ▾ [Speakers](#) [Sponsors](#)

Thursday, November 9 • 9:20am - 10:00am

All the Robots are Coming! The Promise and the Peril of AI

NOW URI.....JUNE-DECEMBER 2017

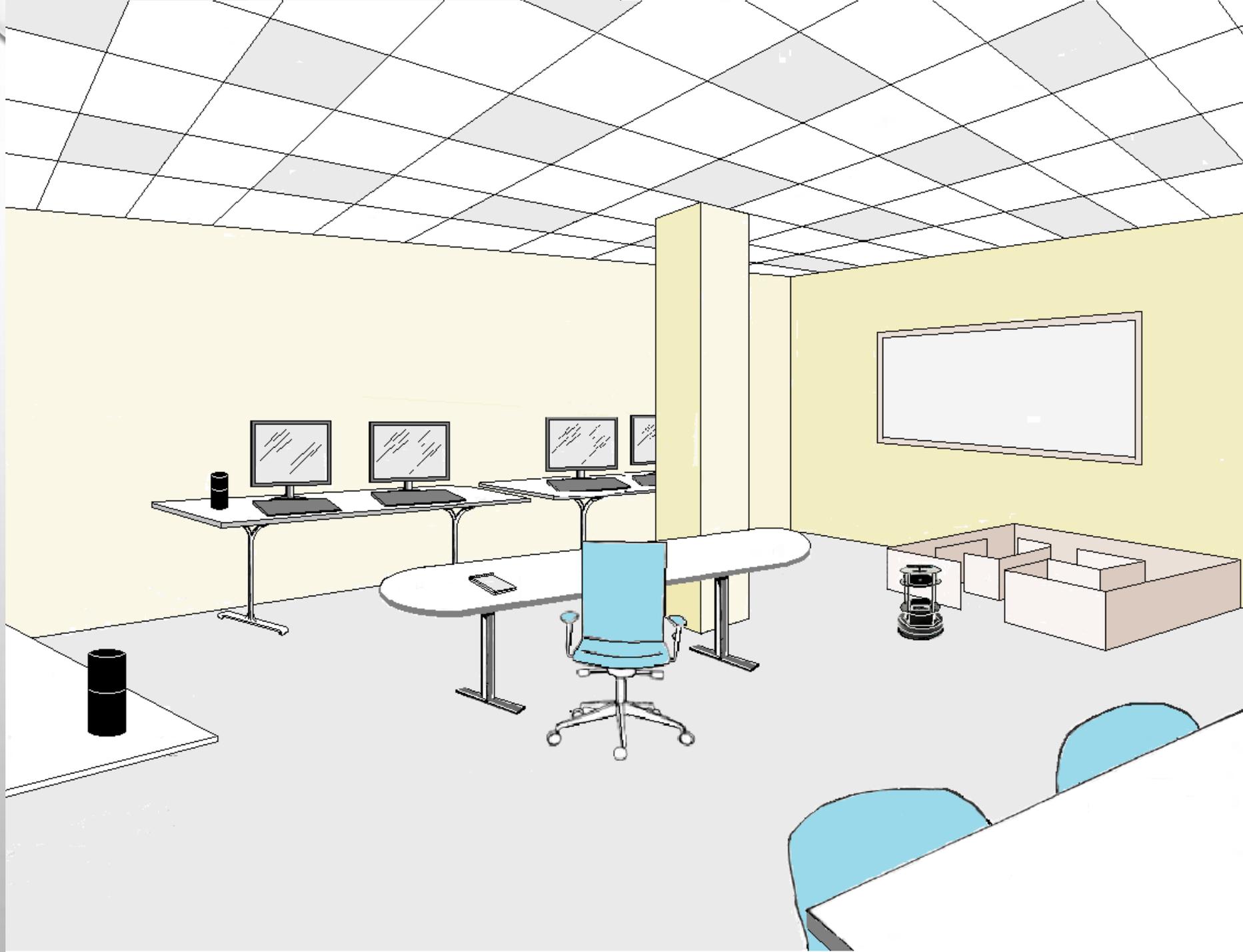


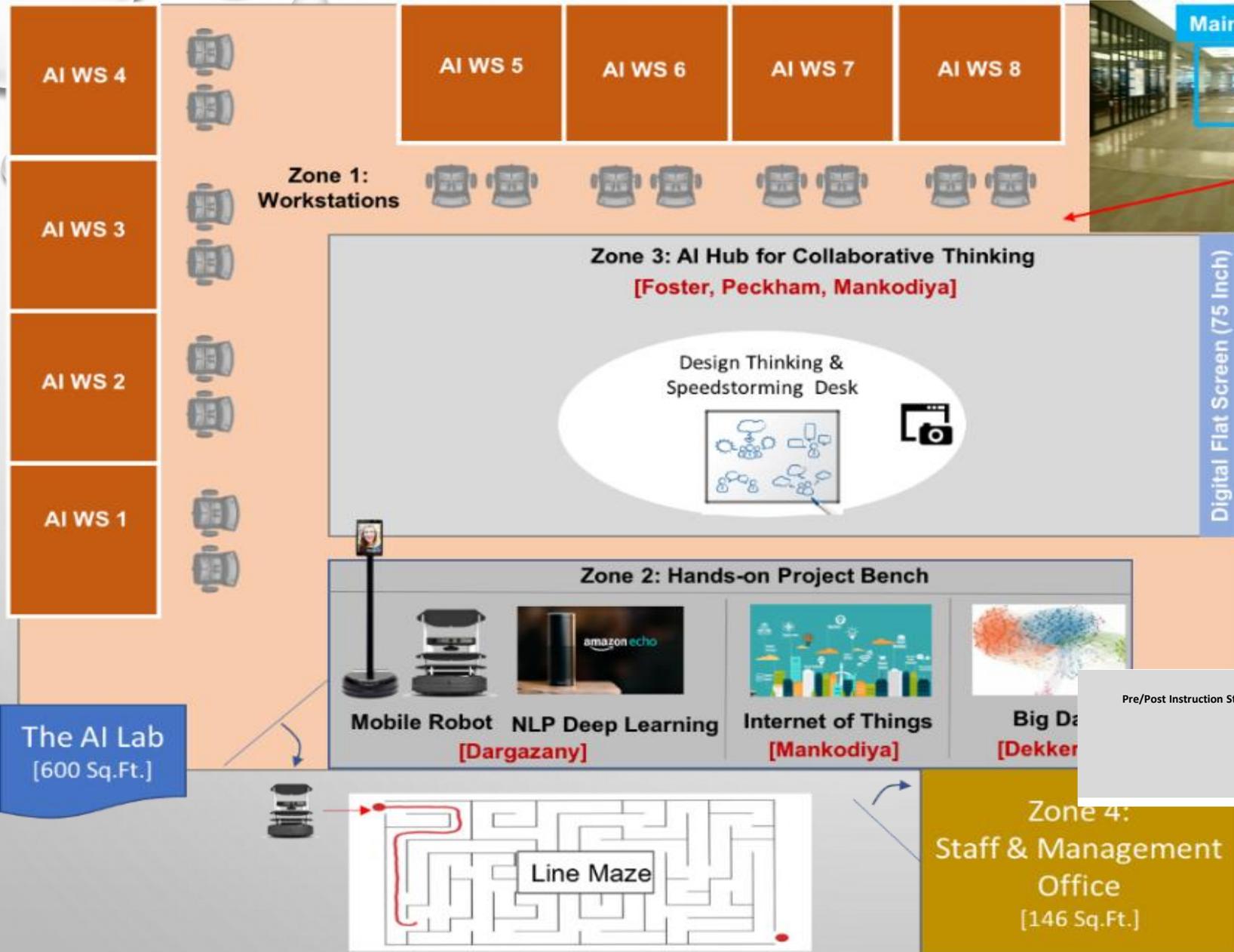
AI.URI TEAM

- KUNAL MANKODIYA, DEPARTMENT OF ELECTRICAL, COMPUTER, AND BIOMEDICAL ENGINEERING
- CHERYL FOSTER, DEPARTMENT OF PHILOSOPHY
- JOAN PECKHAM, DEPARTMENT OF COMPUTER SCIENCE & STATISTICS/BIG DATA INITIATIVE AND DATA SCIENCE PROGRAMS
- HARRISON DEKKER, URI LIBRARIES
- ANGEL FERRIA, URI LIBRARIES
- KARIM BOUGHIDA, URI LIBRARIES

THE LITTLE ENGINE THAT
FACED A TOUGH MORAL DILEMMA







AI Skill Development [Mankodiya, Peckham, Boughida]

BLUE Star Level (Advance)

- AI theme selection
- Hands-on projects
- Deployment & Showcases

YELLOW Star Level (Learning)

- Big Data Tutorials
- Data Science Assignments
- Projects to compute the big data

GREEN Star Level (Beginner)

- Introduction to AI
- Guided tutorials
- Small projects

Pre/Post Instruction Staging

Item	Quantity
Lambda Quad DL/AI (High Power)	5
Lambda Quad DL/AI (Medium Power)	4
Laptop (High Power GPU/CPU)	5
HD Dual Monitor, Keyboard/Mouse	9
Amazon Echo	5
Google Home	5
Deep Learning Robot	8
MyEcho Robot	2
Clone Robot	2
Internet of Things Kit	5

COMPUTERS



Component	Specs – Lambda Quad DL/AI (Medium/High Power)
Processor	Intel TM Core i7-6850k (Medium/High Power)
GPUs	4x 11 GB NVIDIA GEFORCE GTX 1080 Ti - (Medium Power)
	4x 12 GB NVIDIA GEFORCE GTX Titan Xp - (High Power)
Memory and Storage	64 GB DDR4 1 TB SATA SSD + 2 TB HDD (Medium Power)
	128 GB DDR4 1 TB SATA SSD + 3x 2 TB SATA SSDs, RAID 5 (High Power)

SOME ROBOTS....

Autonomous.ai Clone Robot

Instruct Clone to move at a given speed, direction, and amount of time.

Read Clone's internal sensors including velocity, battery level, bumper, and IMU.

See and hear what Clone sees & hears.

Automatically return to the docking station and attach itself with base sensors when the robot needs charging.



MyEcho Robot - Zenbo

Moves independently

Recognizes faces, take photos and videos, make video calls, and provides remote home monitoring

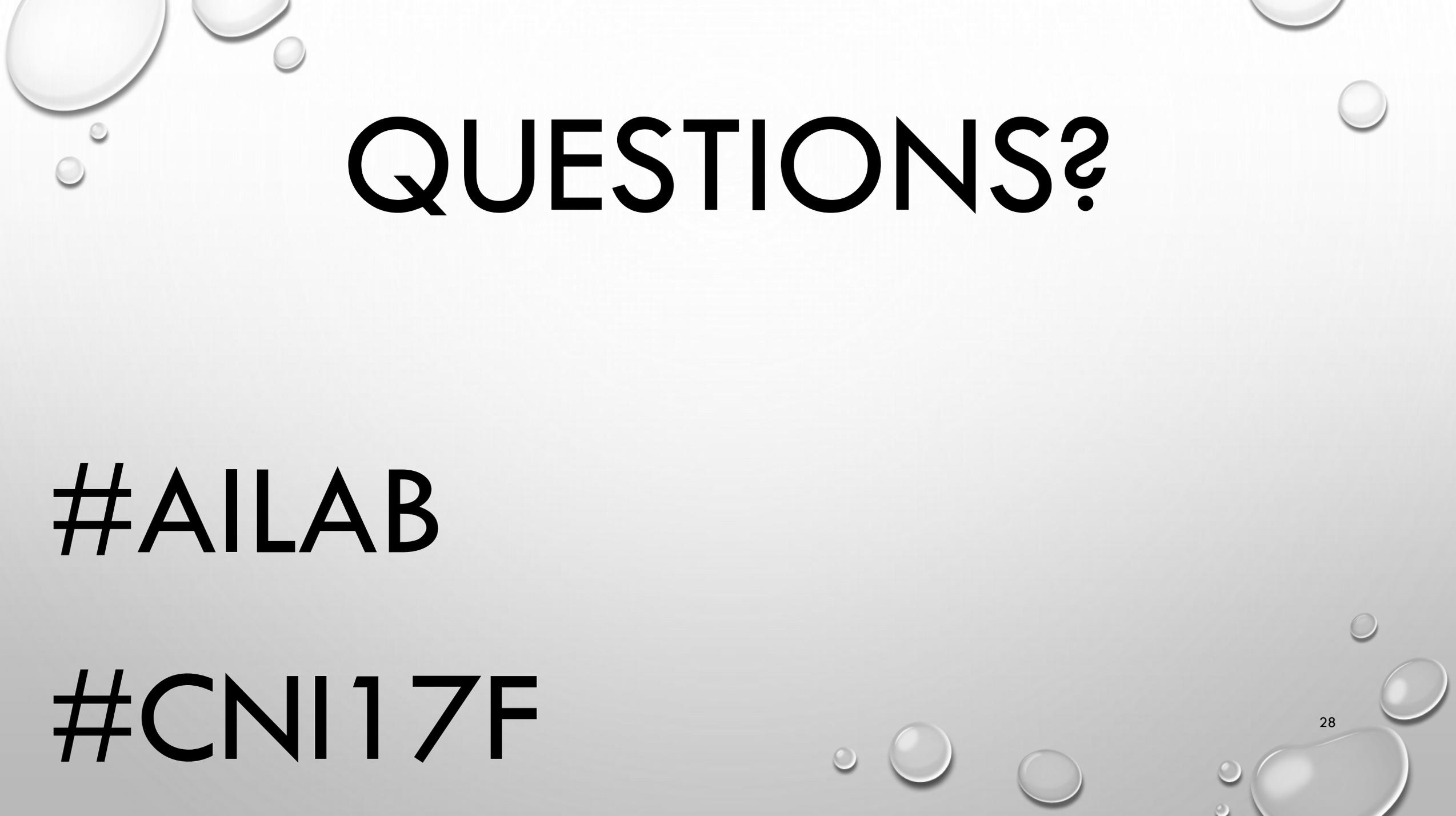
Responds to naturally spoken requests and questions

Learn and adapts with proactive artificial intelligence

Express emotions with many different facial expressions



@KBOUGHIDA
BOUGHIDA@URI.EDU



QUESTIONS?

#AILAB

#CNI17F