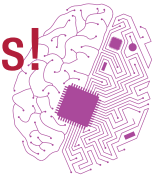# MIT Beaver Works Summer Institute
Spring 2024 Outreach Program – 6 Courses

Yes! You Can Program Autonomous Cars
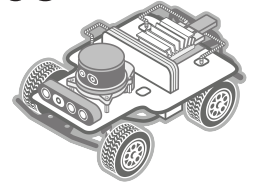
Yes! You Can Design, Build and Fly Model Aircraft

Yes! You Can Program Cognitive Assistants!Yes!

You Can Program Racing Drones!

Many Interesting Things for Aspiring Engineers!

Yes! You Can Learn Practical Radio**

Application Deadline is February 21

No Prior Experience Required!

WHO: High School Students (9th and 10th grade)

WHEN: Saturdays 11am-2pm (EST) - March 9, 16, 23, 30, April 6, 13, 20, 27, 2024*

WHERE: Virtually, through Zoom! (except for the in-person Practical Radio)

REGISTER: https://mit-bwsi.formstack.com/forms/bwsi_spring_2024

. ** Practical Radio is in-person at MIT campus Saturdays 11am – 3pm (EST.).

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Yes! You Can Program Autonomous Cars

No Hardware Required!

A BWSI Mini-Racecar Crash Course

No Cost!

Learn to Code Python!

Lidar

Depth Camera

Color Camera

IMU
Linear: (0.01, -9.84, 0.02) m/s^2
Angular: (0.00, 0.00, 0.00) rad/s

Default Drive

True Speed
0.00 m/s
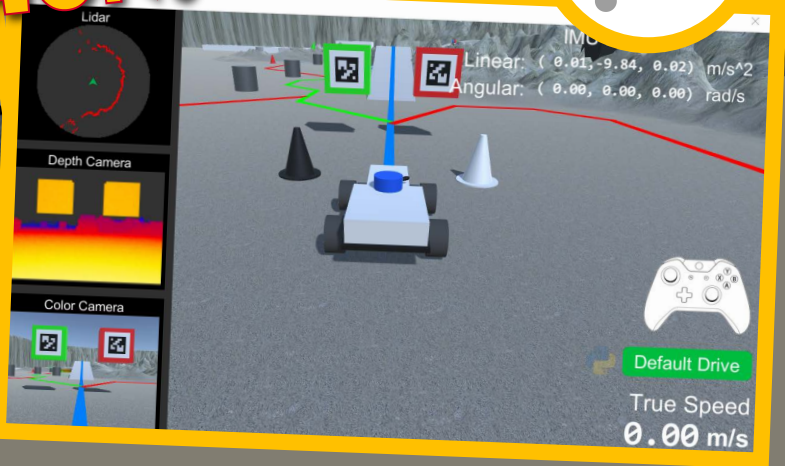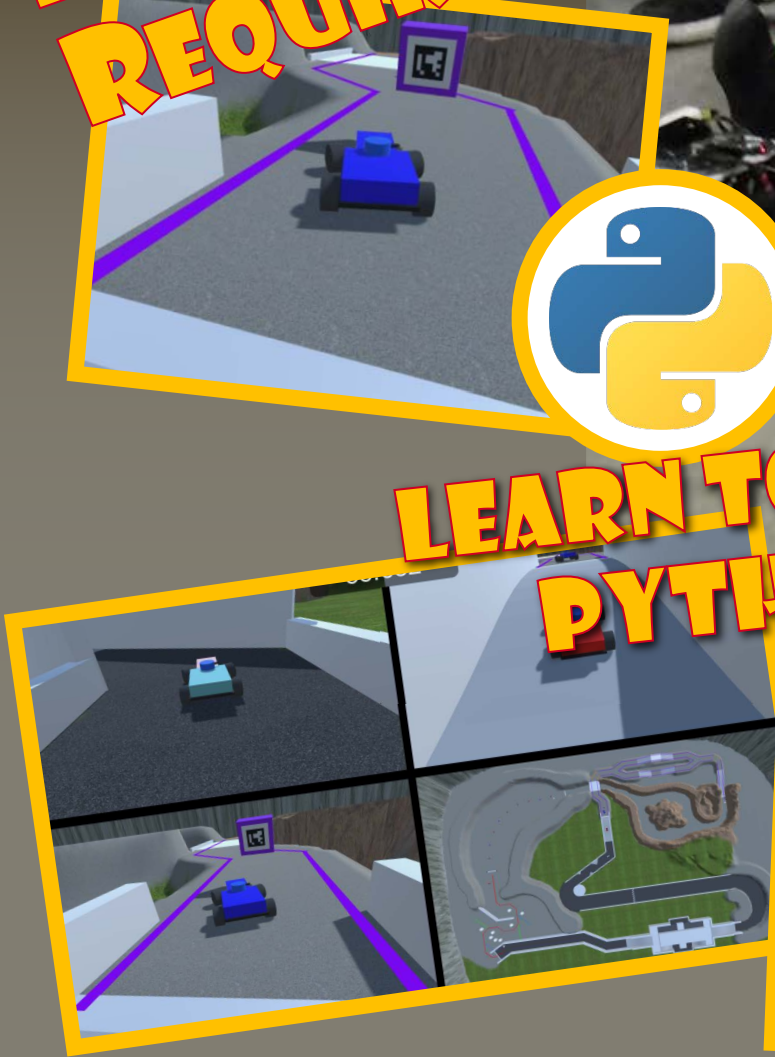
No Prior Experience Required!

Who: High School Students (9th and 10th grade) interested learning about coding and robotics! Beginners encouraged!

When: Asynchronous course with instrctor office hours & required meetings on Saturdays from 11am-2pm (EST) - March 9, 16, 23, 30, April 6, 13, 20, 27, 2024

Where: Online Edly platform through Zoom!

Registration Form: https://mit-bwsi.formstack.com/forms/bwsi_spring_2024

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Yes! You Can Design, Build and Fly Model Aircraft!

Design
Build
Fly
Crash
Rebuild

A
BWSI
(Beaver Works
Summer Institute)
Course

Introduction to RC Model Aircraft Design

No Prior Experience Required!

Who: High School Students (9th and 10th grade) interested in Aerospace and Aeronautics.

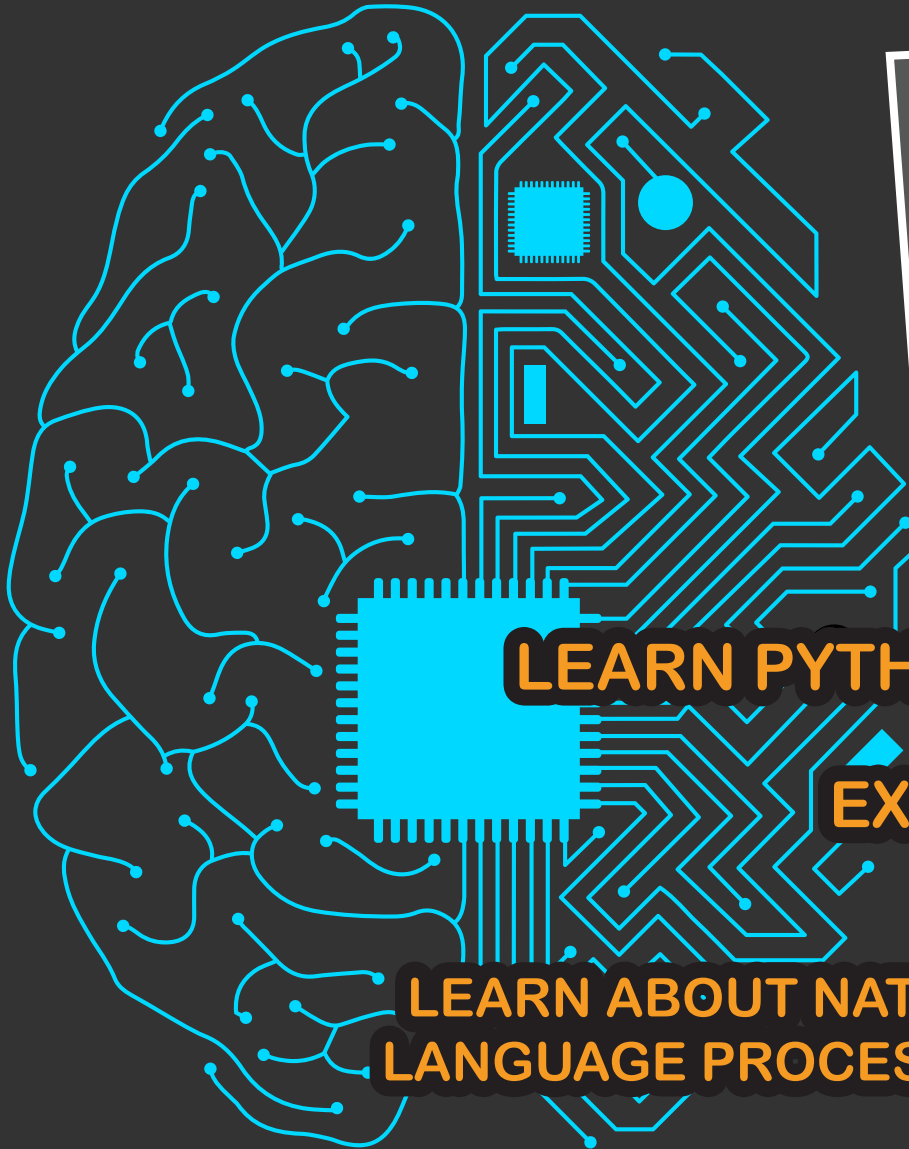**When:** Saturdays 11am-2pm (EST) - March 9, 16, 23, 30, April 6, 13, 20, 27, 2024

Where: Virtually, through Zoom!

Registration Form: https://mit-bwsi.formstack.com/forms/bwsi_spring_2024

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Yes! You Can Program Cognitive Assistants! — a BWSI crash course

An introduction to artificial intelligence through building an autonomous cognitive assistant!

LEARN PYTHON!

EXPLORE MACHINE LEARNING!

LEARN ABOUT NATURAL LANGUAGE PROCESSING!

No Prior Experience Required!

Who: High School Students (9th and 10th grade) interested in learning about code and artificial intelligence! Beginners Encouraged!

When: Saturdays 11am-2pm (EST)-March 9, 16, 23, 30, April 6, 13, 20, 27, 2024

Where: Virtually, through Zoom!

Registration Form: https://mit-bwsi.formstack.com/forms/bwsi_spring_2024

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Yes! You Can Program Racing Drones
Beaver Warrior

Autonomous Drone Obstacle Course
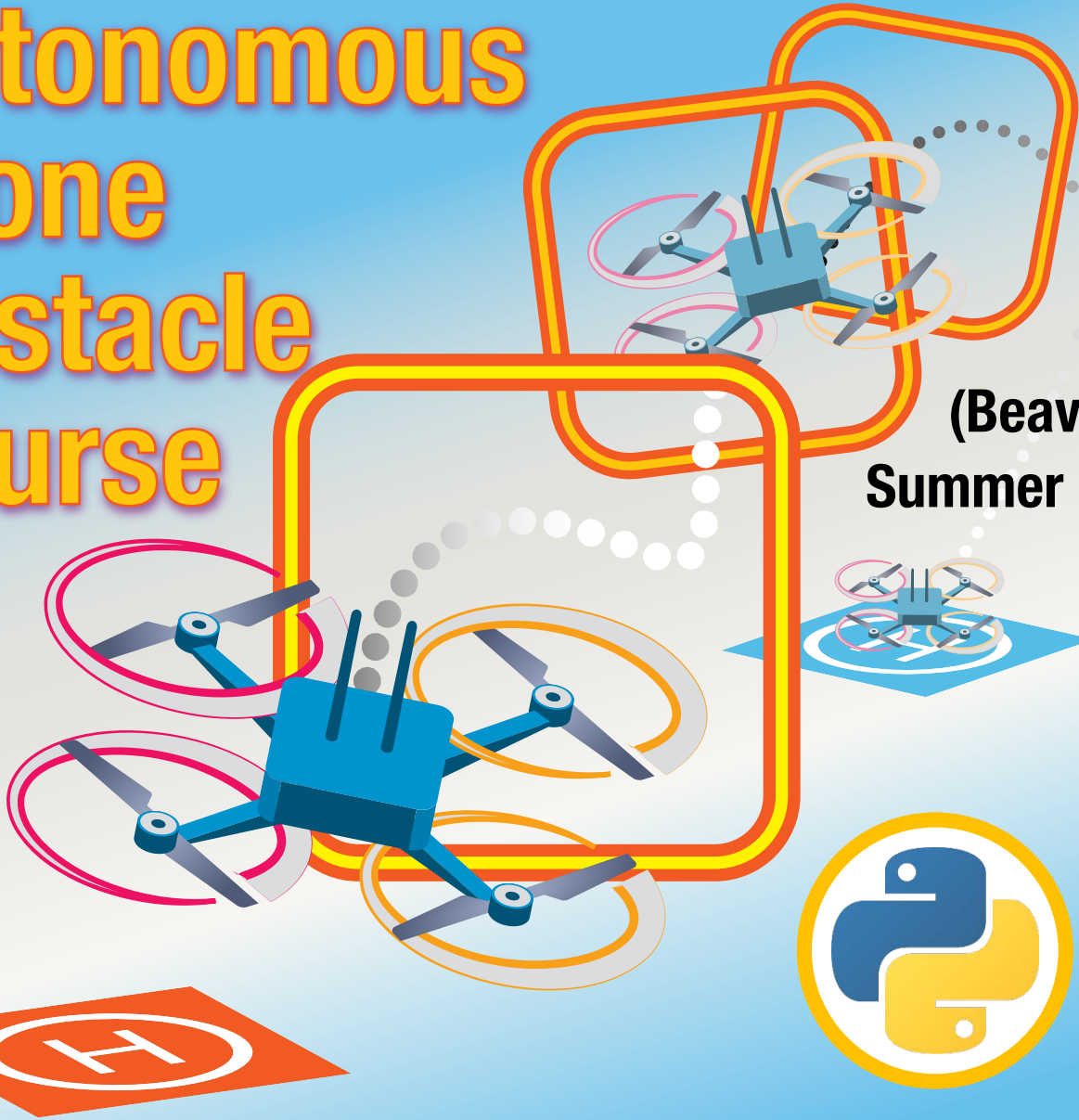
A BWSI (Beaver Works Summer Institute) Course

Learn to Code Python

No Prior Experience Required!

Who: High School Students (9th and 10th grade) interested in Aerospace and Aeronautics.

When: Saturdays from 11am-2pm (EST) - March 9, 16, 23, 30, April 6, 13, 20, 27, 2024

Where: Virtually, through Zoom!

Registration Form: https://mit-bwsi.formstack.com/forms/bwsi_spring_2024

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Many Interesting Things:

For Aspiring Engineers
From Transistors to Data Science

A BWSI Medlytics intro course by Christian Cardozo

An early introduction to the technologies that shape our world, with applications to medical data analytics!

Python •Computer Architecture •Machine Learning
Computer Vision •Linux •The Internet

No prerequisites.
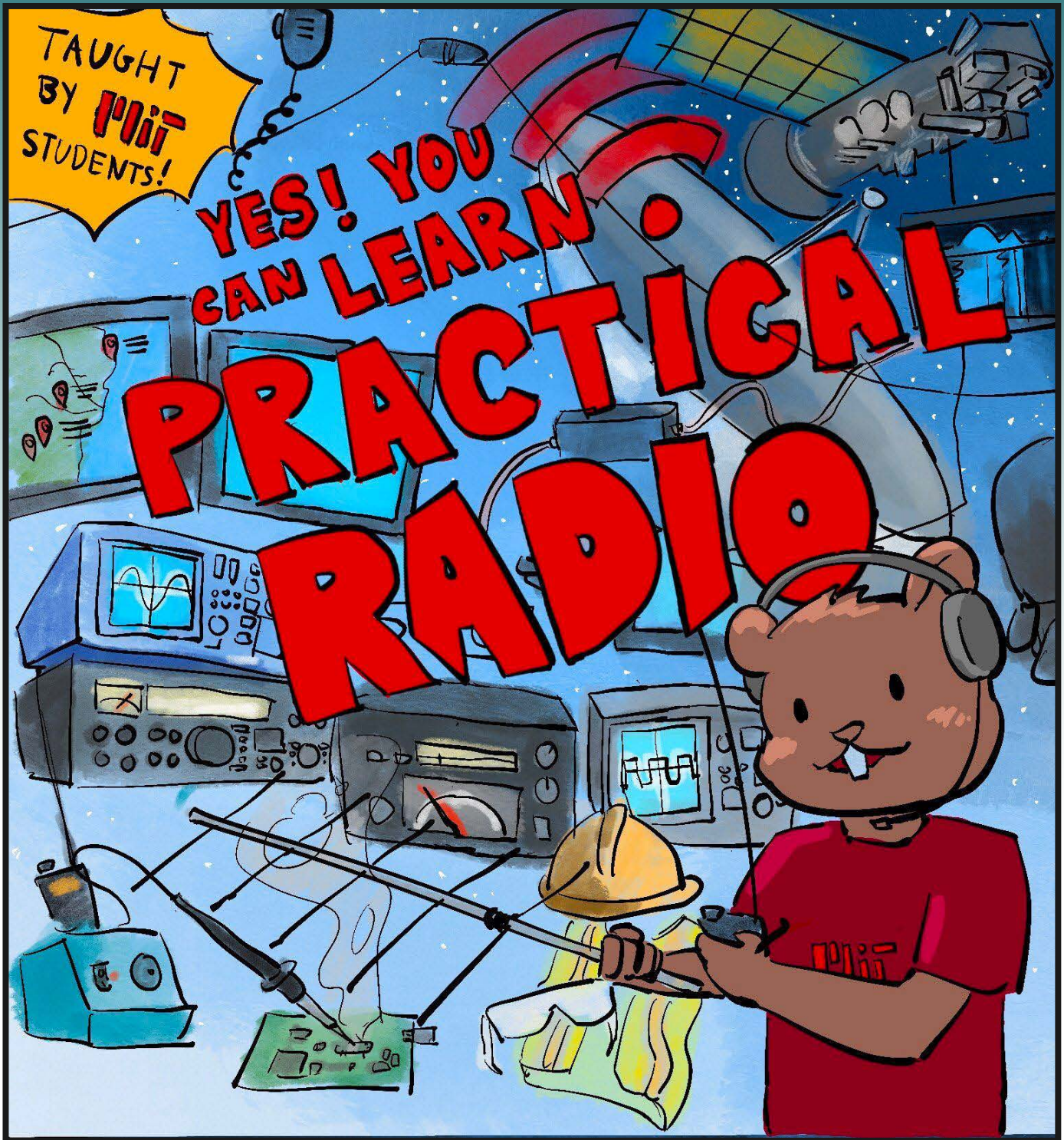## No pressure.

No Prior Experience Required!

WHO: High School Students (9th and 10th grade) interested in learning about computers, coding and medical data analytics. Beginners Encouraged!

WHEN: Saturdays 11am-2pm (EST)-March 9, 16, 23, 30, April 6, 13, 20, 27, 2024

WHERE: Virtually, through Zoom!

REGISTER: https://mit-bwsi.formstack.com/forms/bwsi_spring_2024

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No Prior Experience Required!

Who: High School Students (9th and 10th grade) interested in Ham Radio Technology.

When: Saturdays 11am-3pm (EST) - March 9, 16, 23, 30, April 6, 13, 20, 27, 2024

Where: In-person at MIT campus!

Registration Form: https://mit-bwsi.formstack.com/forms/bwsi_spring_2024

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