MIT Beaver Works Summer Institute
Fall 2021 Outreach Program – 6 Courses

Girls Who Program Autonomous Cars
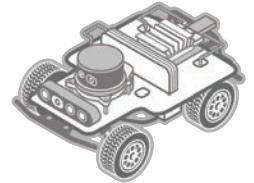
Girls Who Design, Build and Fly Model Aircraft

Girls Who Want to Learn Many Interesting Things

Girls Who Program Cognitive Assistants
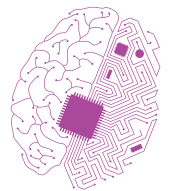
Girls Who Program Autonomous Cars – BWSI-Pacific

**Kwaj Mini-RACECAR Middle School
(Kwajalein Atoll, Marshall Islands)**

No Prior Experience Required!

WHO: High School 11th Grade Female Students

WHEN: Saturdays 11am-2pm (EST): October 16, 23, 30, November 6,13, 20, December 4, 11, 2021

WHERE: Virtually, through Zoom!

REGISTER: https://mit-bwsi.formstack.com/forms/bwsi_fall2021

LINCOLN LABORATORY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Department of Defense
DoDSTEM
Science·Technology·Engineering·Mathematics

Patrick J McGovern
FOUNDATION

MIT School of Engineering

MIT | BEAVER WORKS
Lincoln Laboratory | School of Engineering

GIRLS WHO PROGRAM AUTONOMOUS CARS
A BWSI MINI-RACECAR CRASH COURSE

RACING ROBOTS!

NO COST!

LEARN TO CODE PYTHON!

NO HARDWARE REQUIRED!

NO PRIOR EXPERIENCE REQUIRED!

Who: Female High School Juniors interested learning about code and robots! Beginners encouraged!
When: Saturdays 11am to 2pm (EST) – 10/16, 10/23, 10/30, 11/6, 11/13, 11/20, 12/4, 12/11, 2021
Where: Virtually, through Zoom!
Registration Form: https://mit-bwsi. text

LINCOLN LABORATORY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Department of Defense
DoDSTEM
Science · Technology · Engineering · Mathematics

Patrick J McGovern FOUNDATION

MIT | School of Engineering

MIT | BEAVER WORKS
Lincoln Laboratory | School of Engineering

Girls Who Design, Build and Fly Model Aircraft — A BWSI Crash Course.

Design
Build
Fly
Crash
Rebuild

Introduction to
RC Model Aircraft Design

No Prior Experience Required!

Who: Female High School Juniors interested in Aerospace and Aeronautics.

When: Saturdays 11am to 2pm (EST) — 10/16, 10/23, 10/30, 11/6, 11/13, 11/20, 12/4, 12/11, 2021

Where: Virtually, through Zoom!

Registration Form: https://mit-bwsi.formstack.com/forms/bwsi_fall2021

LINCOLN LABORATORY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Department of Defense
DoDSTEM
Science · Technology · Engineering · Mathematics

Patrick J McGovern
FOUNDATION

MIT | School of Engineering

MIT | BEAVER WORKS
Lincoln Laboratory | School of Engineering

Girls who want to learn

Many Interesting Things:

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!

Computer Architecture • Python
Machine Learning • Computer Vision

No prerequisites.
No pressure.

No Prior Experience Required!

Who: Female High School Juniors interested learning about computers, coding and medical data analytics. Beginners Encouraged!

When: Saturdays 11am to 2pm (EST) – 10/16, 10/23, 10/30, 11/6, 11/13, 11/20, 12/4, 12/11, 2021

Where: Virtually, through Zoom!

Registration Form: https://mit-bwsi.formstack.com/forms/bwsi_fall2021

LINCOLN LABORATORY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Department of Defense
DoDSTEM
Science · Technology · Engineering · Mathematics

Patrick J McGovern
FOUNDATION

MIT | School of Engineering

MIT | BEAVER WORKS
Lincoln Laboratory | School of Engineering

Girls who program cognitive assistants! — a BWSI crash course
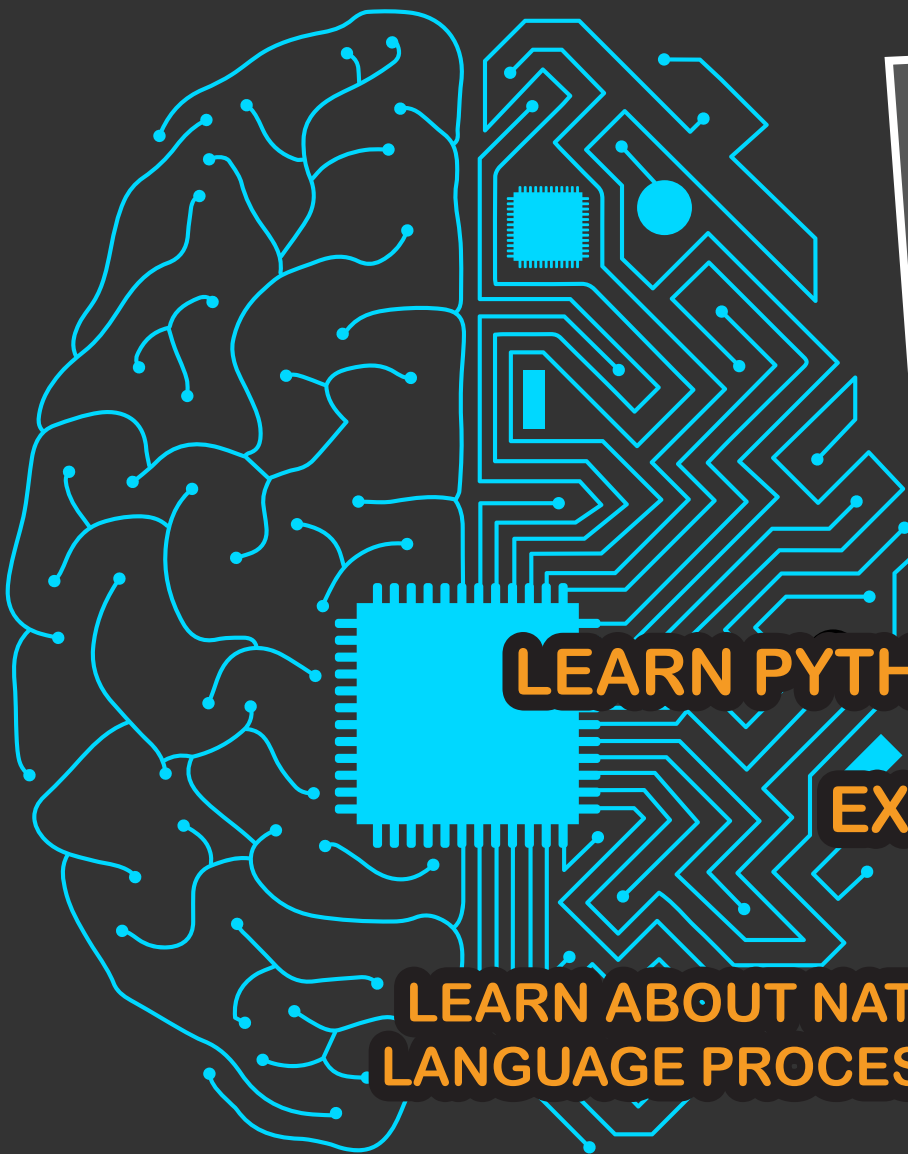
An introduction to artificial intelligence through building an autonomous cognitive assistant!

LEARN PYTHON!

EXPLORE MACHINE LEARNING!

LEARN ABOUT NATURAL LANGUAGE PROCESSING!

No Prior Experience Required!

Who: Female High School Juniors interested learning about code and artificial intelligence! Beginners Encouraged!

When: Saturdays 11am to 2pm (EST) – 10/16, 10/23, 10/30, 11/6, 11/13, 11/20, 12/4, 12/11, 2021

Where: Virtually, through Zoom!

Registration Form: https://mit-bwsi.formstack.com/forms/bwsi_fall2021

LINCOLN LABORATORY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Department of Defense
DoDSTEM
Science · Technology · Engineering · Mathematics

Patrick J McGovern
FOUNDATION

MIT | School of Engineering

MIT | BEAVER WORKS
Lincoln Laboratory | School of Engineering

GIRLS WHO PROGRAM AUTONOMOUS CARS
A BWSI MINI-RACECAR CRASH COURSE

CONNECT WITH GIRLS ACROSS THE PACIFIC!

NO COST!

LEARN TO CODE PYTHON!

NO HARDWARE REQUIRED!

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

Depth Camera

Color Camera

Default Drive

True Speed
0.00 m/s

NO PRIOR EXPERIENCE REQUIRED!

Who: Female High School Juniors interested learning about <u>code</u> and <u>robots</u>! Beginners encouraged!
When: Saturdays 1pm to 4pm (HST) – 10/16, 10/23, 10/30, 11/6, 11/13, 11/20, 12/4, 12/11, 2021
Where: Virtually, through Zoom!
Registration Form: https://mit-bwsi.formstack.com/forms/bwsi_student_kwaj_fall_application_2021
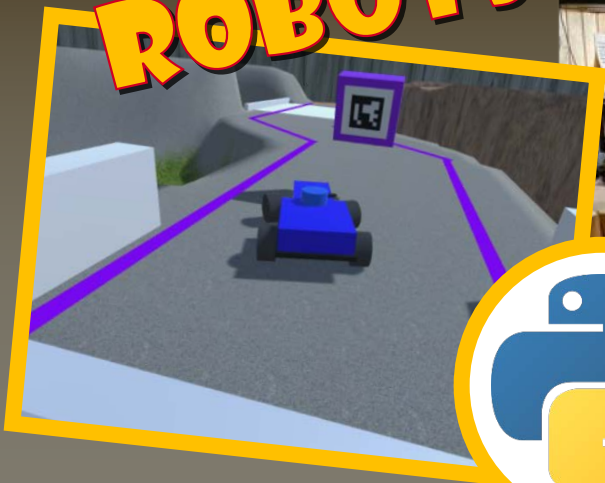
LINCOLN LABORATORY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Department of Defense
DoDSTEM
Science · Technology · Engineering · Mathematics

Patrick J McGovern
FOUNDATION

MIT | School of Engineering

MIT | BEAVER WORKS
Lincoln Laboratory | School of Engineering

Kwaj Mini-racecar Middle School
A BWSI Mini-racecar Crash Course

RACING ROBOTS!

LEARN TO CODE PYTHON!

NO HARDWARE REQUIRED!

No Prior Experience Required!

Who: Kwaj students in grades 7 – 9. Beginners encouraged!

When: TBD, one afternoon/evening per week beginning late October

Where: Namo Weto Youth Center

Registration Form: *Registration form available at Namo Weto Youth Center*

LINCOLN LABORATORY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Department of Defense
DoDSTEM
Science · Technology · Engineering · Mathematics

Patrick J McGovern
FOUNDATION

MIT | School of Engineering