



CODE-IT HACKS

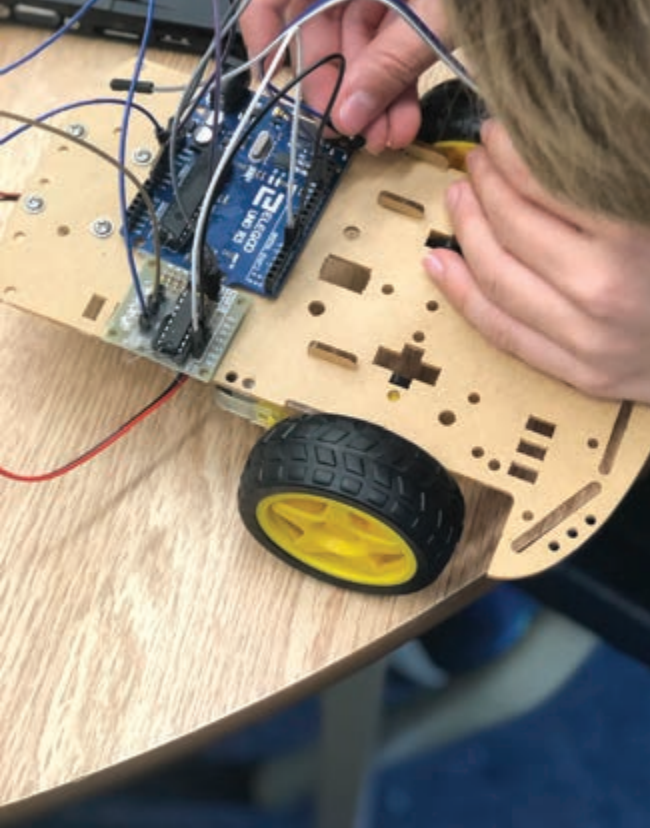
Blyth Academy, Etobicoke
Bloor West Village, Toronto
2489 Bloor St W,
Toronto, ON M6S 1R6

TECHNOLOGY STEM SUMMER CAMPS

WHERE GREAT MINDS GROW



Just Bring your Imagination!



DIRECTOR'S MESSAGE

I believe soft skills and technology skills go hand in hand. When teaching our campers technical skills, we give them the opportunity to develop their communication and collaboration skills that help them get work done in the real world.

As a working industry professional for past 20 years, I often witnessed the struggles of talented engineers and programmers to also be good communicators and team mates. At Code-it Hack technology camp, your child will learn to embrace technology and will also learn to present their ideas and projects with confidence.

As a mother of a 10 year old, I am highly sensitive to my daughter's needs for a balanced childhood, where learning, relaxation, fun and a healthy nutritious lifestyle all go hand in hand. With that in mind, Code-it Hacks camps bring all the required elements of having a fulfilling camp experience.

In our collaborative solution-focused camp, your child will have a fulfilling camp experience with top notch industry professionals, hands on STEAM (Science, Technology, Engineering, Arts and Mathematics) teachings, healthy nutritious lunch options, outdoor off-screen time, field trips, new friendships and lots of surprise treats through the Technology STEAM summer camp weeks.

See you in summer!

Best Regards,
Shirin Merchant

“

To become effective leaders of tomorrow, 21st century learners must be confident in more than just technical skills. They must also be excellent communicators and team mates .

”



Camp Methodology

What is Collaborative Solution-Focused Approach?



In a collaborative, solution-focused approach, students are encouraged to work in teams to create solutions for problems that are ambiguous and for which a complete solution may be unknown. The problems are set in a real world framework.

With this approach, we give our campers the ability to be confident in their technical skills, while teaching them resilience to work with others towards a solution for which there may not be a “right answer”.

Benefits of the approach

- Self awareness
- Anxiety reduction
- Resilience
- Empathy and respect for other ideas - Team work
- Valuing different perspectives

Group Work.

Students work together in small groups of 4. Groups provide a framework in which students can test and develop their level of understanding. Campers will have to list all the tasks and divide them to make progress. Coaches will guide the campers to take responsibility for their tasks and roles in the group.

Problem Solving.

The problems given are often complex in nature and will in general require critical thinking and enquiry.

Discovering new knowledge.

In order to find a meaningful solution, campers will have to seek new knowledge. Campers will have the opportunity to research their topic as they draft a solution.

4 FACTS ABOUT CODE-IT HACKS

#1 PLAY BASED

Code-it Hacks was founded on the basic paradigm of making technology training fun and achievable for all types of learners. All our programs have play-based element. This ensures all lessons are taught via uniquely designed games.

#2 DESIGN THINKING

We don't just dive into learning to code or building robots. The design process is brainstormed, documented and subsequently built.

#3 SMALL CLASS SIZE

A big part of our success is in maintaining small class size never exceeding 10 to 12 campers. There is a coach for every group of 4 students. The coaches work closely with the teams to develop ideas and complete the assigned projects.

#4 INDUSTRY SPECIALISTS

100 % of our team is comprised of industry specialists. We work with talented engineers and computer scientists who have a passion for teaching. They all believe in learning something new every class as they impart something they already know.

“

I like coding because it feels like a new adventure every time I login. I feel like I am a part of the game I am making and it is so fun!

”

10 Year Old Maddison

HALF DAY CAMP
AGES 4 - 6

Ages 4-6 Program - ENGINEERING LIGHT-UP PLUSHIES (HALF DAY)

Learn the basics of electricity and circuits in this fun and educational camp. Kids will make their cute plushies with built in circuits

EXPERIMENT, DESIGN, BUILD

- Learn the engineering process
- ideate and brainstorm your perfect space
- Learn the basics of mechanical and electrical engineering
- Learn the basics of programming in C using Arduino IDE
- Learn basic circuitry with Arduino
- Build and present

Session 1a : AM July 6th - July 10th 9:00 am - 12:00 pm	Ages 4 - 6	\$ 250.00 (per session)
Session 7b: PM Aug 17th - Aug 21 st 1:00 pm - 4:00 pm	Early Bird (By Feb 28th, 2020)	\$225.00
	Extended Care	\$100.00





What you will Learn

Engineering process

Circuits Basic

Programming basic

Arduino Lilypad



What you will Make

Students can choose between the following projects:

Cushy monster

Cuddle bug

Kids will design and sew thier plushie

Kids will bild a light up switch circuit and embed the circuit in the plushie



What you will Take

Entire project

Arduino lilypad board
lilypad leds

Other electrical
components

Other maker components

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Ages 4-6

Program - ENGINEERING

Toy Cars Using Circuits (HALF DAY)

Designing you own toy on your own terms - Super fun. In this camp kids will design a toy car and make it their own. Kids will be introcued to the basics of electricy and circuits to make their car automated

Session 4a : AM July 27th - July 31st 9:00 am - 12:00 pm	Ages 4 - 6	\$ 250.00 (per session)
Session 5b: PM Aug 4th -Aug 7th 1:00 pm - 4:00 pm	Early Bird (By Feb 28th, 2020)	\$225.00
	Extended Care	\$100.00

EXPERIMENT, DESIGN, BUILD

- Learn the engineering process
- ideate and brainstorm your perfect toy product design
- Learn the basics of mechanical and electrical engineering
- LEarn about force and movement
- Biuild and present





What you will Learn

Engineering process

Circuits Basic

Designing a toy and its function



What you will Make

Campers will design and build:

Propeller Car



What you will Take

Entire project

Toy Car (designed and built by campers)

Motors

Propeller

Other electrical components

Other maker components

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Ages 4-6 Program - ENGINEERING

Playful Structures and Playgrounds (Half Day)

A fun engineering camp where kids will take apart their favourite playground equipment to understand simple machines. Campers will then be tasked to design and build their IDEAL playground using the engineering principles of simple machines.

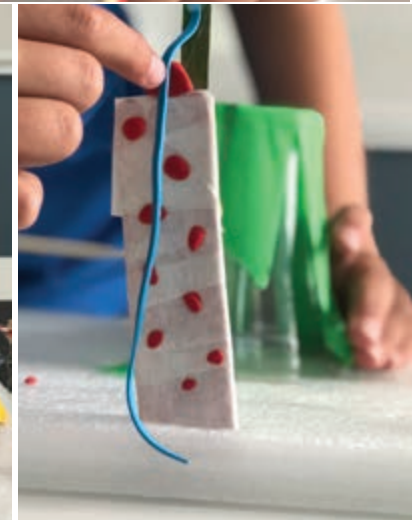
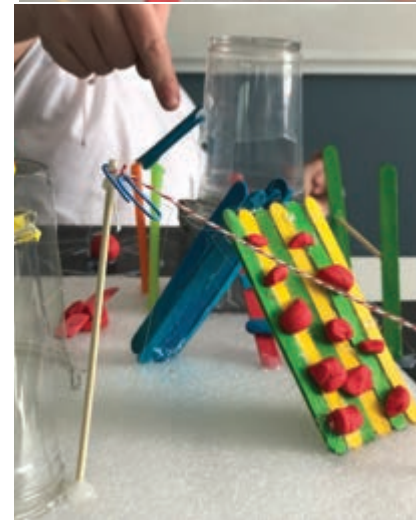
SOLUTION TOPICS:

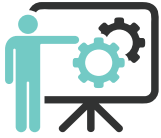
- What are simple Machines? How do simple machines make our lives easier?
- Designing and building the perfect playground

EXPERIMENT, DESIGN, BUILD

- Learn the engineering process
- ideate and brainstorm your perfect play space
- Learn the basics of mechanical and electrical engineering
- Build and present

Session 6b Aug 10th - Aug 14th	Ages 4 -6	\$ 250.00
	Early Bird (By Feb28th, 2020)	\$225.00
	Extended Care	\$100.00





What you will Learn

Engineering process
Simple Machines
Force and movement
Product design and function



What you will Make

Campers will design and build:
Creative simple machines
An ideal Playground



What you will Take

Entire project

Register Here



Ages 4-6

Program - ENGINEERING

SMART (DOLL/BEDROOM) HOUSE (Half Day)

We live in an automated world. Have you ever wondered how everything around us today is SMART? In this camp you will take a deep dive in to the world of SMARTS's and prototype our very own SMART Space.

SOLUTION TOPICS:

- Build a SMART automated home of 21st century. What technological features can improve your life

EXPERIMENT, DESIGN, BUILD

- Learn the engineering process
- ideate and brainstorm your perfect space
- Learn the basics of mechanical and electrical engineering
- Learn the basics of programming in TinkerCAD and Blockly
- Learn basic circuitry with Arduino
- Build and present

Session 2a : AM July 13th - July 17th 9:00 am - 12:00 pm	Ages 4 - 6	\$ 275.00 (per session)
Session 3b: PM July 20h - July 24th 1:00 pm - 4:00 pm	Early Bird (By Feb 28th, 2020)	\$250.00
	Extended Care	\$100.00





What you will Learn

Engineering process

Circuits Basic

Programming basic

Arduino platform

Presentation skills



What you will Make

Students can choose between the following projects:

SMART DOLL HOUSE

SMART BEDROOM

Students will engineer a prototype of a smart space

Students will build a complete automated model of their space



What you will Take

Entire project

Arduino uno board

sensors

Leds

Other electrical components

Other maker components

Register Here



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Ages 4-6 Program - ROBOTICS

Robotics-Mission SPACE (Half Day)

Introduce your little ones to the world of Robotics. Students are sending the rovers to Moon with a number of missions. Will their Rover succeed? In this fun and educational camp, students will design build and code their robots to head to the moon!

SOLUTION TOPICS:

- Colonizing moon - What will life be like on Moon?
- Design, engineer and build a moon base using Robotics

EXPERIMENT, DESIGN, BUILD

- Learn the engineering process
- ideate and brainstorm your perfect space
- Learn the basics of Robotics
- Engineer and Build Rover that can accomplish tasks on the Moon base using Code
- Learn basic of Coding

Session 3a July 20th - July 24th 9:00 am - 12:00 pm	Ages 4 - 6	\$ 250.00
	Early Bird (By Feb28th, 2020	\$225.00
	Extended Care	\$100.00





What you will Learn

Engineering process

Robotics Basic

Programming basic

Presentation skills

Team Work



What you will Make

Campers will work in teams to design and build the following:

Moon Base

Moon Rover

Register Here



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Ages 4-6 Program - Coding

Charlie and the Chocolate Factory (Half Day)

You found the GOLDEN TICKET! Now it's time to create some magic in the CODING factory. Learning to code has never been fun, especially when you are in a chocolate factory. In this camp kids will learn basic coding concepts. They will design and build a variety of animations and a simple game using SCRATCH JR

SOLUTION TOPICS:

- Improve math skills and computational thinking while learning the basics of Coding
- Create animations and simple games using block-based CODE

EXPERIMENT, DESIGN, BUILD

- Learn the engineering process
- ideate and brainstorm chocolate factory space and creative candies that it will produce
- Learn the basics of Coding
- Create amazing animations, stories and simple games with CODE
- Build and present

Session 1b : PM July 6th - July 10th 1:00 pm - 4:00 pm	Ages 4 - 6 \$ 250.00 (per session)
Session 5a: AM Aug 4th - Aug 7th 9:00 am - 12:00 pm	Early Bird (By Feb 28th, 2020) \$225.00
	Extended Care \$100.00





What you will Learn

Engineering process

Programming basics

Sequences and patterns

Algorithm

Animations

Stories

Games

Presentation skills



What you will Make

Campers will work in teams and learn the basics of Design thinking and Coding

Campers will create:

Animations

Stories

Simple Games



What you will Take

Online Portfolio of projects

Register Here



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Ages 4-6 Program - Coding

Mary Poppins CODING School (Half Day)

It's time let lose your imagination as we take a journey to Mary Poppins coding school. She is full of surprises and magic and has agreed to teach you the magic of coding. Learn the basics of coding and build amazing animations and games using CODE

SOLUTION TOPICS:

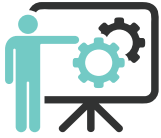
- Improve math skills and computational thinking while learning the basics of Coding
- Create animations and simple games using block-based CODE

EXPERIMENT, DESIGN, BUILD

- Learn the engineering process
- ideate and brainstorm magical rules in Ms.Poppins Coding school
- Disgin and code magical chores
- Learn the basics of Coding
- Create amazing animations, sttories and simple games with CODE
- Biuild and present

Session 2b : PM July 13th - July 17th 1:00 pm - 4:00 pm	Ages 4 - 6	\$ 250.00 (per session)
Session 6a: AM Aug 10th - Aug 14th 9:00 am - 12:00 pm	Early Bird (By Feb 28th, 2020)	\$225.00
	Extended Care	\$100.00





What you will Learn

Engineering process

Programming basics

Sequences and patterns

Algorithm

Animations

Stories

Games

Presentation skills



What you will Make

Campers will work in teams and learn the basics of Design thinking and Coding

Campers will create:

Animations

Stories

Simple Games



What you will Take

Online Portfolio of projects

Register Here



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Ages 4-6 Program - Coding

Treats and Toy Maker Shop (Half Day)

Welcome to IMAGINARIUM - your very own special virtual Treats and Toy maker shop. What special treats and toys will you put on the shop? In this camp students will learn basics of coding. They will imagine magical toys and treats and bring them to life with the power of coding. Help us stock the virtual shelves of the IMAGINARIUM!

SOLUTION TOPICS:

- Improve math skills and computational thinking while learning the basics of Coding
- Create animations and simple games using block-based CODE

EXPERIMENT, DESIGN, BUILD

- Learn the engineering process
- ideate and brainstorm magical toys and treats that only you can imagine and create
- Create amazing animations, stories and simple games with CODE
- Build and present

Session 5b : PM July 27th - July 31st 1:00 pm - 4:00 pm	Ages 4 - 6	\$ 250.00 (per session)
Session 7a: AM Aug 17th - Aug 21st 9:00 am - 12:00 pm	Early Bird (By Feb 28th, 2020)	\$225.00
	Extended Care	\$100.00





What you will Learn

Engineering process

Programming basics

Sequences and patterns

Algorithm

Animations

Stories

Games

Presentation skills



What you will Make

Campers will work in teams and learn the basics of Design thinking and Coding

Campers will create:

Animations

Stories

Simple Games



What you will Take

Online Portfolio of projects

Register Here



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FULL DAY CAMP
AGES 7 - 11

Program - MAKER CAMP

Trending Fashion - WEARABLE Technology

Are you fashion Savvy? Is your fashion sense unique and different from others? If yes, then this the camp that will give you new skills to take your fashion sense to next level. Enter the world of e-textiles. Explore integrating fashion with technology.

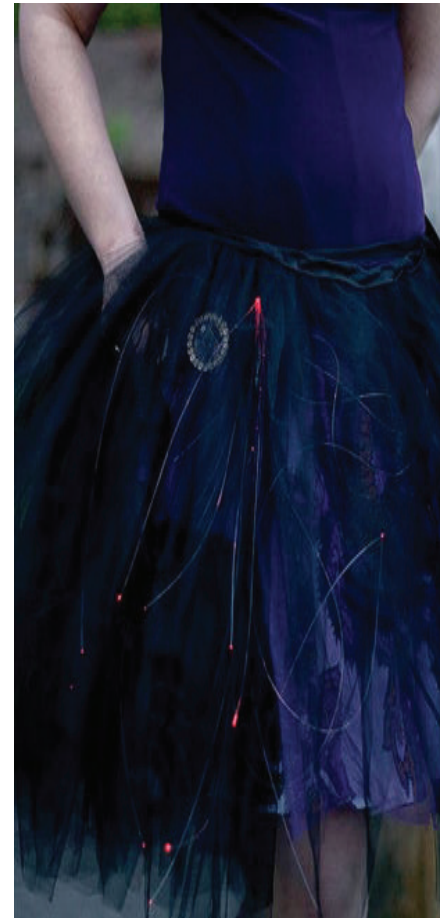
SOLUTION TOPICS:

- Ideate and prototype fashion and tech savvy garment and accessories. DESIGN and CODE brilliant LED sequence. Embed and CODE a SENSOR to make your creation SMART!

EXPERIMENT, DESIGN, BUILD

- Learn the engineering process
- Select your project: From Fashion accessories to assistive technology embedded in e-textiles
- Bring together Function, form and aesthetics
- Learn the basics of electrical engineering
- Learn the art of designing with e-textiles.
- Learn the basics of programming
- Learn basic circuitry with Arduino Lily Pad
- Build and present

Session 1c July 6th - 10th	Ages 7 - 11	\$ 500.00
	Early Bird (By Feb28th, 2020)	\$475.00
	Extended Care	\$100.00





What you will Learn

Engineering process

Design Thinking process

Prototype design

Circuits Basic

Programming basic

Arduino platform

Presentation skills

Product Pitch



What you will Make

Students will make a variety of wearable projects during the week

For the final project, students can choose between the following projects:

Bracelet

Skirt

Purse

Hat/scarf

All creations will have sensor components and programmable LEDs.

Using the design thinking process students will complete their fashion savvy product prototype



What you will Take

Entire project

Arduino Lilypad board

Arduino Lily Pad sensor

Arduino Lily LED's

Other electrical Components

Other maker components



Where will you Go

TECH COMPANY:

This camp will visit a tech company or the company leadership will visit us for Expo



YoungPRENEUR

IDEA INCUBATOR - IGNITE LAB

Join Ignite Lab for a 5 day of entrepreneur camp. Whether you have an idea or you are simply curious, this camp will teach kids the art of developing ideas into real products with cutting edge technology and design thinking principles.

SOLUTION TOPICS:

- Select from three real life problems for which no solution exists
- Campers will work in teams to select their topic and form a working prototype

EXPERIMENT, DESIGN, BUILD

- Using design thinking principles, campers will learn to connect with their audience, ideate, prototype and test a working model
- Campers will get introduced to a suite of emerging technologies from which they will choose to solve their real world problem
- Campers will learn the art of pitching their product idea

Session 2c July 13th - 17th	Ages 7 - 11	\$ 500.00
	Early Bird (By Feb28th, 2020)	\$475.00
	Extended Care	\$100.00

DESIGN THINKING



YOUNG-PRENEUR



What you will Learn



What you will Make



What you will Take



Where will you Go

Engineering process

Campers will work with 3D modeling to make their prototypes

3-D printed models

TECH COMPANY:

Design Thinking process

Campers will convert models via 3D printing

An Arduino board or Micro:bit

This camp will visit a tech company or the company leadership will visit us for Expo

Prototype design

With use of required technology, campers will build and program a working prototype of the model

Project ideas and prepared pitch

This camp will visit MYANT

Circuits Basic

Programming basic

Campers will prepare a product pitch

Competition award. All teams get awarded a recognition. Campers will compete for the following categories:

MAYANT is..

Arduino platform

Micro:bit

Innovation
Design

3-D Printing

Collaboration
Problem Solver

Presentation skills

Product Pitch



CODING ROBLOX

Mystical Ancient Egypt

Get Creative with coding this summer in our adventurous ROBLOX coding camp. Students will learn the basics of programming and get familiar with ROBLOX environment. Students will make plenty of projects to be comfortable making their own levels in ROBLOX by end of the camp week

SOLUTION TOPICS:

- Students will create and build the famous pyramids of Giza and form a game of magic, mythical creatures and treasure hunt!

EXPERIMENT, DESIGN, BUILD

- Learn the engineering process
- Research, ideate and brainstorm ancient Egypt and the mystical stories of pharaohs and pyramids to create a world of their own
- Create amazing animations, stories and simple games with CODE
- Build and present

Session 3c July 20th - 24th	Ages 7 - 11	\$ 500.00
	Early Bird (By Feb28th, 2020)	\$475.00
	Extended Care	\$100.00





What you will Learn

Engineering process

Programming basics

Sequences and patterns

Game rules engine algorithm-
planning and build
Animations

Stories

Games

Presentation skills



What you will Make

Campers will work in teams and learn the basics of Design thinking and Coding

Campers will create:

Animations

Stories

Simple Games



What you will Take

Online portfolio of projects



Where will you Go

TECH COMPANY/FIELD TRIP

This camp will visit a tech company or the company leadership will visit us for Expo

This camp may also have a topic related field trip

Program - MAKER CAMP

SMART (DOLL) HOUSE

We live in an automated world. Have you ever wondered how everything around us today is SMART? In this camp you will take a deep dive in to the world of SMARTS's and prototype our very own SMART Space.

SOLUTION TOPICS:

- Build a SMART automated home of 21st century. What technological features can improve your life?

EXPERIMENT, DESIGN, BUILD

- Learn the engineering process
- Ideate and brainstorm your perfect space
- Learn the basics of mechanical and electrical engineering
- Learn the basics of programming in C using Arduino IDE
- Learn basic circuitry with Arduino
- Build and present

Session 4c July 27th - 31st	Ages 7 - 11	\$ 600.00
	Early Bird (By Feb28th, 2020)	\$520.00
	Extended Care	\$100.00





What you will Learn

Engineering process

Circuits Basic

Programming basic

Arduino platform

Presentation skills



What you will Make

Students can choose between the following projects:

SMART DOLL HOUSE

SMART BEDROOM

SMART FIRE STATION

Students will engineer a prototype of a smart space

Students will build a complete automated model of their space



What you will Take

Entire project

Arduino uno board

Sensors

Leds

Motors

Other electrical Components

Other maker components



Where will you Go

FIELD TRIP:

This camp will visit a Tech company

Register Here



CODING MINECRAFT

Build a world | Mod a world with Java Coding

Don't just play your world, RULE your world. Learn how to transform your creativity into a real MINECRAFT world with your own rules. Transform with the power of coding!

SOLUTION TOPICS:

- Ages 7 - 9: Game Building: Think like a game designer and bring your ideas to life!
- Ages 10 - 12: Modify and have it just your way. Dig deeper in Minecraft world and with the power of Java coding design your gaming world on your terms!

EXPERIMENT, DESIGN, BUILD

- Basics of programming in Java
- Think like a game designer: ideate, brainstorm, design and build
- Be part of a game development team
- Develop your own game and test your friends game
- Build and present

Session 5c Aug 4th - 7th	Ages 7 - 9 Ages 10 - 12	\$ 400.00
	Early Bird (By Feb28th, 2020)	\$375.00
	Extended Care	\$100.00





What you will Learn

Game Design process

Programming basics with Java (ages 10 - 12)

Sequences and patterns

Game rules engine algorithm-planning and build

Presentation skills



What you will Make

Campers will work in teams and learn the basics of Design thinking and Coding

Campers will create:

Mystical worlds

Games



What you will Take

Online portfolio of projects



Where will you Go

TECH COMPANY:

This camp will visit a tech company or the company leadership will visit us for Expo

This camp will visit MYANT

MAYANT is..



CODING DRONES

Mission Flight Control

Welcome to the world of Drone Technology! Whether your child is a novice or experienced with Drones, this camp will take them to the next level. From the engineering and coding basics to real world application of Drones, this camp will open mind-set for young learners to whole new world of possibilities with Drone technology!

SOLUTION TOPICS:

- Engineering with Sensors and Drones: the art of the possible
- Be out in the open field. Research, engineer, and code real life applications of the uncharted territories of Drones technology

EXPERIMENT, DESIGN, BUILD

- Learn the engineering process
- Research, ideate and identify the growing trends in Drone technology
- Design and Map your Drone to a real life challenge
- Build and conquer per-defined maneuvers and surprise challenges
- Present

Session 6c Aug 10 - 14th	Ages 7 - 11	\$ 500.00
	Early Bird (By Feb28th, 2020)	\$475.00
	Extended Care	\$100.00

DESIGN THINKING



TEENS



What you will Learn

Engineering process

Flight control

Combining flight with sensors

Flight maneuver and rescue missions

Programming basics

Presentation skills



What you will Make

Students will make a variety of builds of Drones

Based on the real-life problem the camper chooses to solve, the camp coach will work with the camper to identify and attach components to the Drone

Program the Drone to solve a number of missions that may require flight control, rescue operation and maneuvering skills



What you will Take

Design sketches

Research Journal

Portfolio of programming projects



Where will you Go

TECH COMPANY:
This camp will visit a tech company or the company leadership will visit us for Expo



CODING VIRTUAL REALITY

The 3-D REALM

Enjoyed your last trip to the VR game world! Now lets build one. In this camp students will learn the technology behind the 3D builds. They will design and build multiple worlds and characters and experience them using the Web A-frame and Google Cardboard

SOLUTION TOPICS:

- Introduction to game design using Web-based A-Frame platform
- Developing for Virtual Reality. What do you need to consider?

EXPERIMENT, DESIGN, BUILD

- Ideate, research and design your virtual realm
- Design and journal your virtual space
- Identify game construct
- Build and have a blast!

Session 7c Aug 17th - 21st	Ages 7 - 11	\$ 500.00
	Early Bird (By Feb28th, 2020)	\$475.00
	Extended Care	\$100.00

VIRTUAL REALITY



TEENS



What you will Learn

Game design for VR environments

Techniques for 3D development

Learn the basics of programming

Learn web-based A Frame platform and introduction to HTML

Presentation skills



What you will Make

Campers will design and build multiple mini 3D builds and explore their creations using Google Cardboard

Campers will complete a full research to build Gaming project in 3D



What you will Take

Design sketches

Research Journal

Portfolio of projects



Where will you Go

TECH COMPANY:

This camp will visit a tech company or the company leadership will visit us for Expo



YouTube & Twitch Star

LIGHTS, CAMERA, ACTION!

Give your children creative tools of expression, confidence in story telling, and means to stay connected to 21st century streaming technology. Learn the art of streaming your content, master the art of production, and publish with confidence.

(No Content will be uploaded to the Web.)

SOLUTION TOPICS:

- Share your passion with the world!
- What do you need to consider?

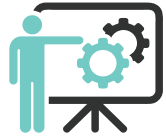
EXPERIMENT, DESIGN, BUILD

- What is responsible content
- brainstorm content ideas
- Design production seup
- Equipment and production use
- Journal and rehearse content
- Camera, Action, Lights!

Session 8c Aug 24th - 28th	Ages 7 - 11	\$ 500.00
	Early Bird (By Feb28th, 2020)	\$475.00
	Extended Care	\$100.00



TEENS



What you will Learn



What you will Make



What you will Take



Where will you Go

Good Vs. Bad Content

Camera Etiquette

Equipment use and training

Camera shots and Production

Voice training

Setting up and starting a YouTube or Twitch Channel

Campers will make multiple short videos per content selection throughout the camp duration

A final video production per our checklist

Research Journal

Portfolio of projects (USB)

This camp will go on a field trip



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FULL DAY CAMP
12+ TEENS

TEENS

Program - MAKER CAMP

WEARABLE FASHION TECH

Are you fashion Savvy? Is your fashion sense unique and different from others? If yes, then this the camp that will give you new skills to take your fashion sense to next level. Enter the world of e-textiles. Explore integrating fashion with technology.

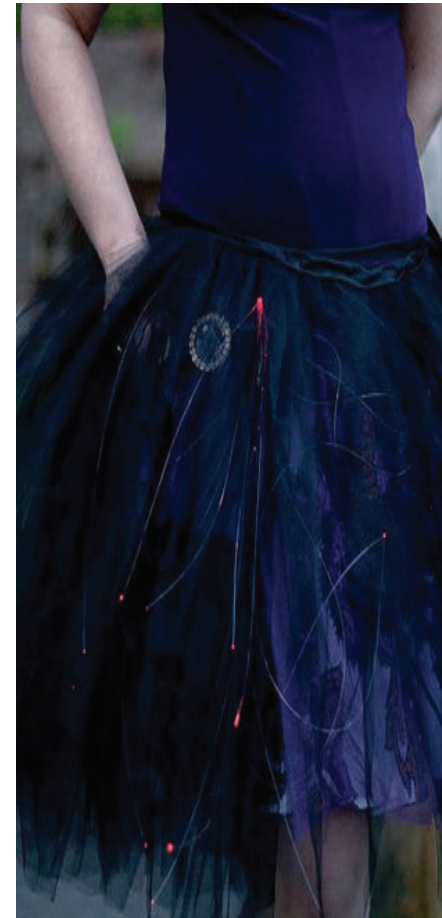
SOLUTION TOPICS:

- Ideate and prototype fashion and tech savvy garment and accessories. DESIGN and CODE brilliant LED sequence. Embed and CODE a SENSOR to make your creation SMART!

EXPERIMENT, DESIGN, BUILD

- Learn the engineering process
- Select your project: From Fashion accessories to assistive technology embedded in e-textiles
- Bring together Function, form and aesthetics
- Learn the basics of electrical engineering
- Learn the art of designing with e-textiles.
- Learn the basics of programming
- Learn basic circuitry with Arduino Lily Pad

Session 1d July 6th -10th	12+ Teen	\$ 550.00
	Early Bird (By Feb28th, 2020	\$525.00
	Extended Care	\$100.00



TEENS



What you will Learn

Engineering process
Design Thinking process
Prototype design
Circuits Basic
Programming basic
Arduino platform



What you will Make

Students will make a variety of wearable projects during the week

For the final project, students can choose between the following projects:

- Bracelet
- skirt
- Purse
- Hat/scarf

All creations will have sensor components and programmable LEDs.

Using the design thinking process students will complete their fashion savvy product prototype



What you will Take

Entire project

Arduino Lilypad board

Arduino Lily Pad sensor

Arduino Lily LED's

Other electrical components

Other maker components



Where will you Go

TECH COMPANY / FIELD TRIP:
This camp will visit a tech company or the company leadership will visit us for Expo

Register Here



TEENS ENTREPRENEUR

IDEA INCUBATOR - IGNITE LAB

Join Ignite Lab for a 5 day of entrepreneur camp. Whether you have an idea or you are simply curious, this camp will teach kids the art of developing ideas into real products with cutting edge technology and design thinking principles.

SOLUTION TOPICS:

- Select from three real life problems for which no solution exists
- Campers will work in teams to select their topic and form a working prototype

EXPERIMENT, DESIGN, BUILD

- Using design thinking principles, campers will learn to connect with their audience, ideate, prototype and test a working model
- Campers will get introduced to a suite of emerging technologies from which they will choose to solve their real world problem
- Campers will learn the art of pitching their product idea

Session 2d July 13 - 17	12+ TEEN	\$ 550.00
	Early Bird (By Feb28th, 2020)	\$525.00
	Extended Care	\$100.00

DESIGN THINKING



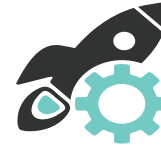
TEENS



What you will Learn



What you will Make



What you will Take



Where will you Go

Engineering process

Campers will work with 3D modeling to make their prototypes

3-D printed models

TECH COMPANY:

Design Thinking process

Campers will convert models via 3D printing

An Arduino board or Raspberry Pi

This camp will visit a tech company or the company leadership will visit us for Expo

Prototype design

With use of required technology, campers will build and program a working prototype of the model

Project ideas and prepared pitch

This camp will visit MYANT

Circuits Basic

Competition award. All teams get awarded a recognition. Campers will compete for the following categories:

MAYANT is..

Programming basic

Arduino platform

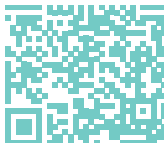
Physical computing with Raspberry Pi

Innovation
Design
Collaboration

3-D Printing

Presentation skills

Product Pitch



CODING VIRTUAL REALITY

The 3-D REALM

Enjoyed your last trip to the VR game world! Now lets build one. In this camp students will learn the technology behind the 3D builds. They will design and build multiple worlds and characters and experience them using the Web A-frame and Google Cardboard

SOLUTION TOPICS:

- Introduction to game design using Web-based A Frame platform
- Developing for Virtual Reality. What do you need to consider?

EXPERIMENT, DESIGN, BUILD

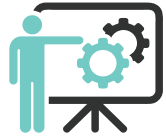
- Ideate, research and design your virtual realm
- Design and journal your virtual space
- Identify game construct
- Build and have a blast!

Session 3d July 20th - 24th	12+ TEEN	\$ 550.00
	Early Bird (By Feb28th, 2020	\$525.00
	Extended Care	\$100.00

VIRTUAL REALITY



TEENS



What you will Learn

Game design for VR environments

Techniques for 3D development

Learn the basics of programming

Learn web-based A Frame platform and introduction to HTML

Presentation skills



What you will Make

Campers will design and build multiple mini 3D builds and explore their creations using Google Cardboard

Campers will complete a full research to build Gaming project in 3D



What you will Take

Portfolio of projects



Where will you Go

TECH COMPANY:

This camp will visit a tech company or the company leadership will visit us for Expo



TEENS

Program - MAKER CAMP

IoT SMART HOUSE - INTERNET OF THINGS

We live in an automated world. Have you ever wondered how everything around us today is SMART? In this camp you will take a deep dive in to the world of SMARTS's and prototype our very own SMART Space.

SOLUTION TOPICS:

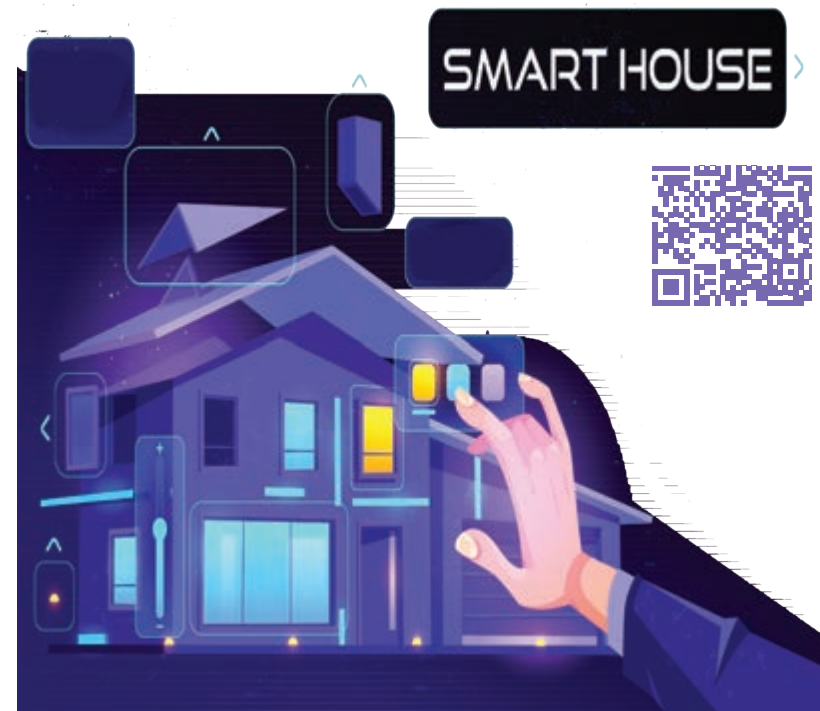
- Build a SMART automated and connected home of 21st century. What technological features can improve your life?

EXPERIMENT, DESIGN, BUILD

- Learn the engineering process
- Ideate and brainstorm your perfect space
- Learn the basics of mechanical and electrical engineering
- Learn the basics of programming in C using Arduino IDE
- Learn basic circuitry with Arduino
- Build and present

Session 4d July 27th - 31st	12+ TEENS	\$ 550.00
	Early Bird (By Feb28th, 2020)	\$525.00
	Extended Care	\$100.00

INTERNET OF THINGS



TEENS



What you will Learn



What you will Make



What you will Take



Where will you Go

Engineering process

Students will make a variety of wearable projects during the week

Entire project

Design Thinking process

For the final project, students can choose between the following projects:

Arduino Lilypad board

Prototype design

Arduino Lily Pad sensor

TECH COMPANY:
This camp will visit a tech company or the company leadership will visit us for Expo

Circuits Basic

Arduino Lily LED's

This camp will visit MYANT

Programming basic

Bracelet

Other electrical
Components

MAYANT is..

Arduino platform

Skirt

Purse

Other maker components

Presentation skills

Hat/scarf

Product Pitch

All creations will have sensor components and programmable LEDs.

Using the design thinking process students will complete their fashion savvy product prototype



ARTIFICIAL INTELLIGENCE

AI Powered IMAGE RECOGNITION

Can you imagine the possibilities if your computer could tell if you are entering your house or a stranger is entering just by looking at your face.

Well this camp is all about making smart computers with the power of machine learning. Welcome to the world of Artificial Intelligence!

SOLUTION TOPICS:

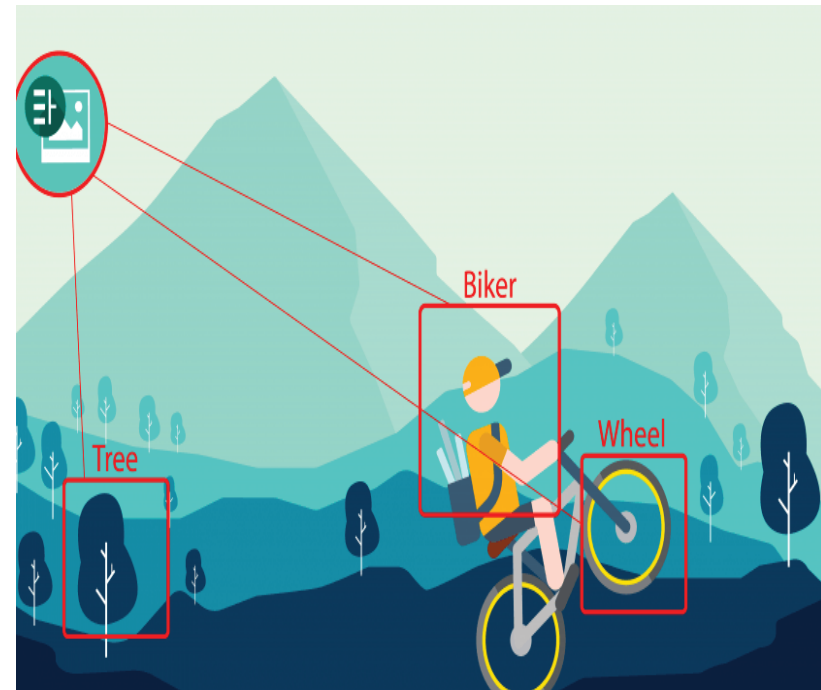
- Thinking of making a self driving car, can your computer tell if there is a cross walk and if a cat is crossing the street or just a piece of paper rolling?
- Who should access my bedroom? Only me. Can you be sure its me by loking at my face?

EXPERIMENT, DESIGN, BUILD

- ideate, research and design your content
- Learn the basic of AI
- Learn the basics NLP
- Learn the IBM Watson Ecosystem
- Design and plan your classifiers
- Build, publish, monetize and have a blast!

Session 5d Aug 4th - 7th	12+ TEEN	\$ 525.00
	Early Bird (By Feb 28th, 2020)	\$500.00
	Extended Care	\$100.00

MACHINE LEARNING



TEENS



What you will Learn

What you will Make

What you will Take

Where will you Go

Learn the basic of Artificial Intelligence

Intro to Machine Learning

Facial Recognition
Biometrics

Image Classification
Supervised Learning
Algorithm

Train and test models

poorly trained models
and user bias

Presentation skills

You will start with simple projects and progress to a fully functional and trained model for image recognition

Will your model identify animals, monsters, people or cars?

YOU DECIDE!

FUN: All work and no play..

Don't worry you will not be coding all day. We have a fun week planned for you with lots of outdoor activities and field trip to augment your learning experience

Portfolio of projects

TECH COMPANY:

This camp will visit a tech company or the company leadership will visit us for Expo



CODING DRONES

Mission Flight Control

Welcome to the world of Drone Technology! Whether your child is a novice or experienced with Drones, this camp will take them to the next level. From the engineering and coding basics to real world application of Drones, this camp will open mind-set for young learners to whole new world of possibilities with Drone technology!

SOLUTION TOPICS:

- Engineering with Sensors and Drones: the art of the possible
- Be out in the open field. Research, engineer, and code real life applications of the uncharted territories of Drones technology

EXPERIMENT, DESIGN, BUILD

- Learn the engineering process
- Research, ideate and identify the growing trends in Drone technology
- Design and Map your Drone to a real life challenge
- Build and conquer per-defined maneuvers and surprise challenges
- Present

Session 6d Aug 10 - 14th	Ages 7 - 11	\$ 550.00
	Early Bird (By Feb28th, 2020)	\$525.00
	Extended Care	\$100.00

DESIGN THINKING



TEENS



What you will Learn

Engineering process

Flight control

Combining flight with sensors

Flight maneuver and rescue missions

Programming basics

Presentation skills



What you will Make

Students will make a variety of builds of Drones

Based on the real-life problem the camper chooses to solve, the camp coach will work with the camper to identify and attach components to the Drone

Program the Drone to solve a number of missions that may require flight control, rescue operation and maneuvering skills



What you will Take

Design sketches

Research Journal

Portfolio of programming projects



Where will you Go

TECH COMPANY:
This camp will visit a tech company or the company leadership will visit us for Expo



YouTube & Twitch Star Lights, Camera, Action

Give your teens creative tools of expression, confidence in story telling, and means to stay connected to 21st century streaming technology. Learn the art of streaming your content, master the art of production, and publish with confidence.

(No Content will be uploaded to the Web.)

SOLUTION TOPICS:

- Share your passion with the world!
- What do you need to consider?

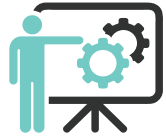
EXPERIMENT, DESIGN, BUILD

- What is responsible content
- brainstorm content ideas
- Design production seup
- Equipment and production use
- Journal and rehearse content
- Camera, Action, Lights!

Session 7d Aug 17th - 21st	12+ TEEN	\$ 550.00
	Early Bird (By Feb28th, 2020)	\$525.00
	Extended Care	\$100.00



TEENS



What you will Learn



What you will Make



What you will Take



Where will you Go

Good Vs. Bad Content

Camera Etiquette

Equipment use and training

Camera shots and Production

Voice training

Setting up and starting a YouTube or Twitch Channel

Campers will make multiple short videos per content selection throughout the camp duration

A final video production per our checklist

Research Journal

Portfolio of projects (USB)

This camp will go on a field trip



ARTIFICIAL INTELLIGENCE

AI Powered CHATBOTS

Have you ever wondered how Google finishes our thought just when you begin to type? Welcome to world of Natural Language processing (NLP). In this camp, campers will learn to build a smart chatBot using Python + NLP Classifier + IBM Watson technology

SOLUTION TOPICS:

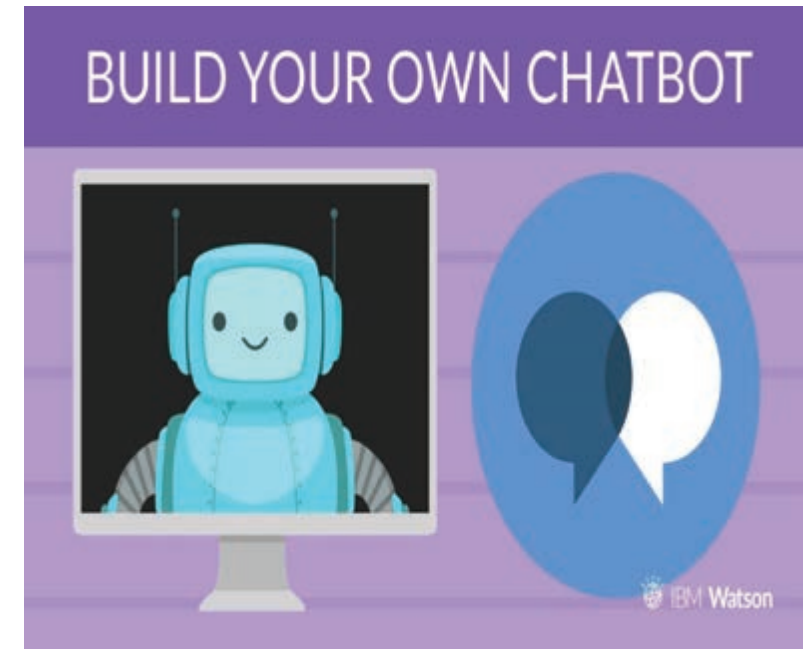
- What product or service are you offering? Can your SMART BOT take care of customer responses while you catch some zzz's?

EXPERIMENT, DESIGN, BUILD

- ideate, research and design your content
- Learn the basic of AI
- Learn the basics NLP
- Learn the IBM Watson Ecosystem
- Design and plan your classifiers
- Build, publish, monetize and have a blast!

Session 8d Aug 24th - 28th	12+ TEEN	\$ 600.00
	Early Bird (By Feb28th, 2020)	\$520.00
	Extended Care	\$100.00

NATURAL LANGUAGE PROCESSING



TEENS



What you will Learn

What you will Make

What you will Take

Where will you Go

Learn the basic of Artificial Intelligence

Intro to Machine learning

Train and Test models

Learn the basics Natural Language Processing

Supervised Learning algorithm

Learn the IBM Watson Ecosystem

Monetizing your creation
Product Pitch

Presentation skills

A working Chatbot

You will start with simple projects and progress to a fully functional and working Chatbot

Will it take Ice cream orders or serve smoothies or will you make a homework helper?
YOU DECIDE!

FUN: All work and no play..

Don't worry you will not be coding all day. We have a fun week planned for you with lots of outdoor activities and field trip to augment your learning experience

Portfolio of projects

TECH COMPANY:

This camp will visit a tech company or the company leadership will visit us for Expo

