THE GIANT ROOM

FALL 2020 PROGRAMS

The GIANT Room is an innovation hub where children act on their most ambitious dreams. Founded by two Ph.D.'s in Education and backgrounds in engineering and science: Dr. Azadeh Jamalian and Dr. Jessica Mezei

Address: 550 West 28th Street. (between 10th and 11th avenue)
Contact: demand@thegiantroom.com; (646) 360-2639
Website: www.thegiantroom.com

Programs and Content:
We offer programs and content at the intersection of design, art, engineering, coding, technology, math, science, and literacy. We work with you to design a curriculum that aligns with your child's needs and interest. In Fall 2020, we offer in person programs (morning or afternoon sessions), live online afterschool, or live online on-demand programs private with your own group of friends.

In Person Programs

We design a morning or after-school program based on your child's interests and needs, private for your group at our hub. You may **choose any of the sample programs listed on pages 3 to 7** of this document, or simply tell us about your child's interests and we'll put together an engaging learning experience for them.

Students have access to all materials and tools needed for their program. Included are our fabrication equipment and additional creative technology such as laser cut machine, 3D printer, embroidery machine, sticker and button maker, electronics, littleBits, Ozobot, Dash and Dot, Makey Makey, micro-controllers such as Microbit and Arduino, building sets such as Rigamajig and Clixo, all sorts of arts and crafts materials. No matter which program you choose for your child, they are always welcome to use any of the tools and equipment in the space based on their aspirations, and our staff is always ready to guide them on how to use the machines, and challenge them to refine their designs.

When:
Morning Sessions: Any 2 hour block between 10am to 1pm
Afternoon Sessions: Any 2 hour block between 2 to 6pm

Duration:
You may request as may sessions as you wish per week.
Minimum booking of 10 sessions are required. In case of lock-down, you won't be charged for the sessions you haven't used.

Ages:
For kids 3 to 12 years old

Fee:
$50/session/student. Each session is 2 hours.
Minimum of 5 students per group is required.
Minimum booking of 10 sessions are required. In case of lock-down, you won't be charged for the sessions you haven't used.

GIANT Fabrication Equipment

Laser Cut Machine
Glowforge Pro laser cut machine, giving your child the opportunity to build 2D and 3D models of their designs out of wood, felt, cardboard, leather and more.

3D Printer
MakerBot 3D printer, giving your child the opportunity to design and print a 3D objects as part of prototyping process.

Sticker Machine
Cricut Maker with versatile fine-point blades enables cutting sticker sheets, vinyls, paper, and felt quickly and accurately

Button Maker
Design your very own buttons with original graphics, hand-drawn drawings, or stickers of your own design.

Embroidery Machine
Brother Embroidery machine allowing kids to embroider their own designs, using built-in samples, original digital graphics, or coded patterns on fabric - creating the coolest patches.

GIANT Afterschool STEM Clubs

We have 6 clubs you could choose from. Each club meets once a week live online. Depending on the club you join, we'll send you a box of materials to make, play, and learn with.

When: Each club meets once a week, 4:00 to 5:00pm
Dates: Sept 21st to Jan 30th
Ages: For kids 5 to 12 years old
Fee: $15/session + Material fee
Register: www.thegiantroom.com/STEMClubs

Mondays: Nature Science
From growing your own butterflies and mushrooms, to exploring different habitats, or being inspired by nature to create your own art. Participants immerse themselves in the wonder of nature, learn about life cycles, ecosystems and the balance of forces in the natural world.

Material Fee: $350

Mondays: Think like a Maker
Think like a pilot, engineer or even a bug! Participants learn prototyping techniques to tackle age-appropriate challenges, work collaboratively, and think creatively, all using recycled material they have at home.

Material Fee: $0

Tuesdays: Design and Fashion
From 3D design in Tinkercad, to illustration design, sewing, patching, and weaving, participants immerse themselves in the exciting world of fashion. They will also learn how to make smart attire by coding and attaching microcontroller and sensors to their pieces.

Material Fee: $250

Wednesdays: Build with Rigamajig
From self portrait to pulleys, speed boats, vacuum, dragons, unicorns and everything in between, participants dream of new creations and bring them to life with Rigamajig. They learn fundamentals in simple machines.

Material Fee: $565

Thursdays: Music and DJing
Participants create and mix their own original tracks using DJ software and music apps, build custom instruments, explore electronic music, convert sound to color, design their DJ persona, and perform live!

Material Fee: $250

Fridays: Doodles & Comics
Participants will write thier original stories, design new characters and worlds, learn techniques to master their storytelling as well as doodling skills, and publish their very own comics!

Material Fee: $0

On Demand Programs: Live Online

We design a workshop series based on your child's interests and needs, and according to your family's schedule. You may request 1x1 sessions or private with your group of friends.

Classes: You may choose any of the sample programs on **pages 3 to 7 of this document,** or simply tell us about your child's interest and we'll design an engaging learning experience for them.

Register: https://www.thegiantroom.com/learningondemand

Fee: $75/session + Material fee (for selected programs). You may request 1x1 sessions or private small group sessions with friends. Price will be divided between participants. So if you have 5 kids in your group, each would pay $15. If you book 5 sessions, you'll recieve a free one. If you book 10 sessions, you'll recieve 3 free ones.

When: On your schedule

**Duration:** Each session is one hour. We recommend booking 5 to 10 sessions per subject.

SAMPLE PROGRAMS FOR KIDS 6 TO 12 YEARS OLDS - IN PERSON OR ON-DEMAND LIVE ONLINE

Microcontrollers

Students design and code their own gadgets such as a step counter, digital watch, interactive emotion display with Microbit. They learn fundamentals in coding, sensors, inputs, and outputs of a micro controller.
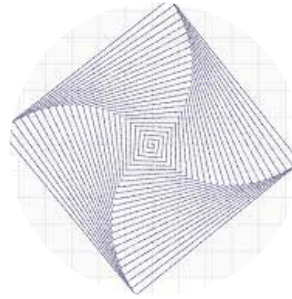
Creative Coding & Math

Students will learn how to express their creativity through code. They learn fundamentals in coding in scratch, code.org. Turtle Stitch, and p5.js Java Script library - all accessible to everyone including beginners.

Stop Motion Animation

Students design scenes and craft characters using clay, recycling, art and craft materials. They design storyboards and learn techniques to create their own digital animations

Music and DJing

Participants create and mix their own original tracks using DJ software and music apps, build custom instruments, explore electronic music, convert sound to color, design their DJ persona, and perform live!
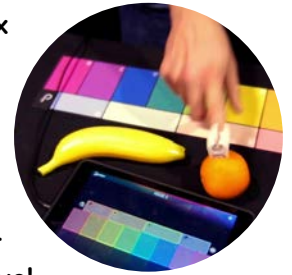
AI & Invent for Good

Students learn about machine learning, coding, and design thinking while inventing solutions for the problems they care about. They also practice public speaking as they present their inventions.

Product Design

Students learn prototyping techniques, 2D graphic, and 3D design in Tinkercad, and fabricate their designs using fabrication machines (3D printer, laser cut, embroidery machine, sticker machine, and button maker). Sky is the limit of what they can build.

Nature Science

From growing your own butterflies and mushrooms, to exploring different habitats, participants immerse themselves in the wonder of nature, learn about life cycles, ecosystems and the balance of forces in the natural world.

Building With Rigamajig

From self portrait to pulleys, speed boats, vacuum, dragons, unicorns and everything in between, participants dream of new creations and bring them to life with Rigamajig. They learn fundamentals in simple machines.

SAMPLE PROGRAMS

SAMPLE PROGRAMS FOR KIDS 6 TO 12 YEARS OLDS - IN PERSON OR ON-DEMAND LIVE ONLINE

Coding & Robotics
Students learn coding in scratch and blockly, explore the relationship between hardware and software as they work with Ozobot, littleBits Code, Dash and Dot, and Makey Makey.

DIY Electronics
Participants immerse themselves in the exciting world of electronics, build their own battery sources, sensors, switches, and outputs, and give them a purpose by turning them into gadgets, greeting cards, and everything in between.

Design and Fashion
From 3D design in Tinkercad, to illustration design for laser cutting, sewing, patching, and weaving, students immerse themselves in the exciting world of fashion.

Invention with littleBits
Participants dream of new inventions, gadgets, and games, or machines and build then with littleBits electronic building blocks! They master the invention process, learn about basics in machine design including inputs, senors, outputs, and more.

Game Arcades
Students learn about different game genres, design their own games such as pin ball machines, mazes, and marble roller coasters. They build original toys while learning the design process empathy, and user testing,

Broadway Show
Students write original stories and songs, design characters, cast for their show, design costumes, build their own stage, design sets, prepare posters, and put on a big show!

Think Like a Maker
Think like a pilot, engineer or even a bug! We equip students with the rapid prototyping techniques to tackle age-appropriate challenges, work collaboratively, and think creatively.

Field Trips & Animals
We'll take virtual field trips around the world. Mix analog skills with digital skills to design and create animals with different characteristics, some move, some light-up, some have patterns, all inspired by our trips!

SAMPLE PROGRAMS

SAMPLE PROGRAMS FOR KIDS 6 TO 12 YEARS OLDS - IN PERSON OR ON-DEMAND LIVE ONLINE

Start Your Own Business
Dream a new business, build it, and launch it! Students will design their business models, do market research, make prototypes, define their value propositions, decide on their go-to-market strategy, plan a customer journey, and launch their first channel!

Doodles & Comics
Participants will write thier original stories, design new characters and worlds, learn techniques to master their storytelling as well as doodling skills, and publish their very own comics!

Drawing & Painting
Participants learn about drawing and painting techniques. They create visual art of still objects, abstract graphics and paintings, and do life drawings of animals or humans.

Slime & Video Editing
Slime is all about polymers! A chemical reaction occurs between the glue and the borate ions, and slime is the new magic formed! Participants experiment with new formulas, make videos, and lean to edit their recordings!

Scripting in Roblox
Particpants explore different game genres in Roblox, learn fundamentals in scripting, character, and animation design, and code and publish their own games. The Roblox platform uses a text based programming language.

Sculpture & Clay
From sculpting with clay, to wire, and paper mache, participants design and make their own sculptures. From there, they can turn their sculptures into toys, accessories to wear, or dream catchers, and more.

Modeling Marine Worlds
Participants learn about the magic of the life underwater, dream and build new inventions inspired by the ocean. From fish models, to AI that cleans water, to animations stimulating fish life, they immerse themselves in the waves of marine science.

LEGO
Participants dream of new narratives, learn techniques to build LEGO models, and bring their stories to life one block at a time. From there, they can delve into making simple machines, create magical worlds, or even record a stop motion animation.

THE GIANT ROOM

SAMPLE PROGRAMS

Narratives and Engineering
Inspired by the Novel Engineering project st Tufts University, students will listen to stories that represent challenges, and then solve problems by creating simple machines using recycled, arts, and crafts materials.

Make Art with Herve Tullet
Inspired by Hervé Tullet, the renowned artist and children's book author, kids create their own art pieces, build an interactive mini museum, attract visitors, and showcase their creations!

Gardening
Students learn how to garden in any space! They turn unexpected objects into planters, creatures, code watering devices, grow their own food and design a garden attraction for everyone to enjoy!

Public Speaking
Participants focus on various social and global issues from health to safety, entertainment, and climate change, come up with solutions, build prototypes, test, and present their inventions on stage!

Kitchen Science
What's for dinner? Does it taste good? Investigate where food comes from, growing your own food, our taste buds, and chemistry behind how food is cooked. Take a multi-sensory journey toward your next meal or snack.

Puppet Design
Participants learn new techniques to design puppets of all sizes with different types of materials, fabric, and recyclables. They can also explore voice over and becoming a puppeteer.

Paper Engineering
Participants explore paper as structural pieces. From origami to folding techniques, 3D masks, and even simple machines, they learn paper engineering techniques to master their crafting skills and be amazed of what they can do with the simplest of materials.

Architecture Design
Participants create cool spaces, buildings, and landmarks using different techniques, sustainable materials, and fabrication tools. As part of the process they will meet real architects working on buildings in NYC.

Programs for 3-5 Year Olds

GIANT for younger Dreamers

GIANT programs for pre-schoolers are the perfect blend of hands-on making, play, and learning. Kids will develop their creative, motor, and social-emotional skills while learning about science, math, literacy, and social sciences.

PROGRAMS FOR KIDS 3 TO 5 YEARS OLD - IN PERSON OR ON-DEMAND LIVE ONLINE

Farm to Table
Farm animals to tractors, barns, chicken coops, vegetable gardens, and fruits! Kids make ice cream with fruits, pizza with vegetables, and avocado toast with their harvests! We'll go on virtual trips to farms, read books, make, play and share!

Field Trips & Cars
We'll go on field trips in cars, balloons, and on horses! Kids make vehicles and go on imaginary trips to nature, camp and stargaze! We'll make, explore, read, and share fantastic memories from our trips!

Bugs and Nature
Bugs who eat vegetables and flowers to bugs who eat other bugs! Those who crawl and those who fly! Those who shine and those who hide! We'll explore the magical world of bugs and build the most aspiring garden with arts and crafts material and GIANT wood models.

Travel like a Maker
Kids dream of new destinations around the world, and travel like a maker! They play pilot, build planes, choose destinations, explore food, animals, landmarks in different parts of the world, document their travel, make souvenirs, and share the joy.

Dream City
Dream and build a city with moving cars and trains, tall and small homes, fun shops and food carts, parks, playgrounds, and more! We'll go on virtual trips to cities around the world, read books about city life, make, and share!

Mission to Mars
Kids explore the magic of space in Mission to Mars! From rocket ships to planets, stars, and a sky no one can avoid gazing at, kids dream and make a fantastic space full of stories to discover.

More About The GIANT Approach

We work with you to learn more about your child's interests and we can make recommendations for programs based on their interests. You can also sign them up for a specific program from our sample programs.

As they continue their learning with our GIANT team, we spark their interests in new fields and at the same time help them to dive deep on subjects they really like.

For example, a group may start a coding class with us, and show interest in robotics. From there, we may introduce them to sensors, microcontrollers, inputs, and outputs, and help them to fabricate a model for their robot using the laser cut machine or the 3D printer.

Another group may start a coding class, and show interest in fashion. From there, we may introduce them to the embroidery machine and show them how they can code graphic patterns for their designs, and help them to make their pieces interactive with microcontrollers.

This approach helps kids to get exposed to many STEAM (STEM + Arts) programs in a way they can relate to, and at the same time get really good at what they like.

Our promise to you: your child will always feel the joy of learning and making while at The GIANT Room, and will be inspired to take on challenges and be a more independent learner day by day.

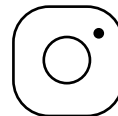### Contact Us

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About GIANT Team

The GIANT Room is founded by two PhDs in education, and backgrounds in engineering, science, and math. All GIANT instructors are graduates from top universities including Stanford, Columbia, Parsons, NYU, and Cooper Union. All of our instructors experts in their field and have been highly trained on GIANT approach of interest based learning and pedagogy.

Azadeh (Azi) Jamalian, PhD is the founder of The GIANT Room. She has a PhD in Cognitive Studies in Education from Teachers College, Columbia University, and bachelors degree in Systems Engineering. Azi has years of experience working with and teaching children. She is a TED speaker, have written many article and book chapters on education, and has received numerous awards including IES Prize for Excellence in Research on Cognition and Student Learning.

Jessica Mezei, PhD is co-founder of The GIANT Room. She has a PhD in Science Education from Teachers College, Columbia University and is a former science teacher for middle school aged children. Jessica has years of experience teaching in formal and informal settings including museums such as Museum of Natural History in New York. Her expertise is on play-based pedagogy in STEM fields.