



# FAIRFAX SUMMER 2024 SCHEDULE

TIME	A: 9 am - 12 pm	B: 9 am - 12 pm	C: 12:30 pm - 3:30 pm	D: 12:30 pm - 3:30 pm
Jun 17 - 21	JR Inventors Workshop	Modding with Minecraft®	Ninja Robotics with LEGO®	Roblox® World Creators
Jun 24 - 28	Bits & Bytes JR Explorers	3D Design & Print	Intro to Roblox®	Become A YouTuber
Jul 1 - 3 (3-Days only)	JR Adventures in Game Design	Ninja Robotics with LEGO®	Code Your Own Arcade	Intro to Roblox®
Jul 8 - 12	JR Block Builders Adventure Camp (with ROBLOX* & MINECRAFT*)	Future Minds Al Academy	3D Design & Print	LEGO® Python Engineers
Jul 15 - 19	JR Makers with MicroControllers	Coding Arcade Tycoon	Minecraft® Modding Masters	Become A YouTuber
Jul 22 - 26	JR Inventors with Makey Makey	Code Your Own Cartoons	Stop Motion Animation	LEGO® Python Engineers
Jul 29 - Aug 2	JR Inventors Workshop	Roblox® World Creators	Future Minds Al Academy	Ninja Robotics with LEGO®
Aug 5 - 9	Bits & Bytes JR Explorers	3D Design & Print	Become A YouTuber	Modding with Minecraft®
Aug 12 - 16	JR Block Builders Adventure Camp (with ROBLOX® & MINECRAFT®)	Roblox® World Creators	LEGO® Python Engineers	Coding Arcade Tycoon

Opportunities offered by organizations other than Fairfax County Public Schools are neither sponsored nor endorsed by the Fairfax County School Board, the Superintendent, or a specific school. These opportunities may utilize technology tools that have not been assessed by the Fairfax County Public Schools Department of Information Technology. Students should gain permission from their parent or guardian before engaging in any non-FCPS enrichment opportunity and families should review the Terms of Service, User Agreements, and Privacy Policy for any technology platform that the enrichment opportunity may use before participating.





### JR ADVENTURES IN GAME DESIGN Ages 5-7



This camp builds a foundation of basic coding concepts through coding games such as hide-and-seek, a simple clicker game, and a maze. They will have a blast remixing games into their very own creations while learning how to create backgrounds, characters, and

### JR INVENTORS WITH MAKEY MAKEY



This camp kids will use a Makey Makey circuit board and household materials, to learn about electronics, game controllers, and how hardware and software interact. Ninjas will work together to create, reflect, and share their work as they invent new ways to interact with computers!

### JR INVENTORS WORKSHOP

Ages 5-7



This Camp is all about teaching and empowering Ninjas to become the makers and creators of their own handson STEM projects! Ninjas will use a variety of fun tools and activities to develop their creative engineering and design skills.

### JR BLOCK BUILDERS ADVENTURE CAMP Ages 5-7 (WITH ROBLOX® & MINECRAFT®)



Ninjas will dive deep into the world of game design and development using Minecraft® and Roblox®. They will enter pre-built worlds filled with activities and challenges that will teach key concepts about replicating the physical world in games such as building construction, communities, flight simulation, and more

### **BITS & BYTES JR EXPLORERS**



This Camp inspires a curiosity in the world of electronics and physical computing. Using a micro:bit microcontroller and a Makey Makey circuit board, Ninjas will design and build a variety of interfaces, controllers, sensors, sounds, and more. Ninias in this Camp will learn to harness the power of hardware and software.

code their own custom models,

modeling and printing.

### JR MAKERS WITH MICROCONTROLLERS Ages 5-7



This camp introduces the magical world of physical computing and storytelling with a microcontroller called micro:bit. JR Ninias will learn how sensors and electronics can make household items, such as playdough, cardboard, and aluminum foil come to life! JR Ninjas will have introductory understanding of circuitry, sensors and how they interact with programming fundamentals.

### **MODDING WITH MINECRAFT®**



Learn how to make unique mods (modifications that change the game)! Ninjas will create their own custom tools, weapons, armor, enemies, and more! By the end of the camp, Ninjas will be able to export their mods for friends and family to explore at home using Minecraft® Java Edition.

### **3D DESIGN & PRINT**



Ages 5-7



Ninjas will create retro-style arcade games with Microsoft MakeCode Arcade. They combine the power of coding with game design to enhance their programming skills and develop games inspired by classic platformers and adventure games! Ninjas will bring their games to life on handheld gaming devices to play and share with friends

# **INTRO TO ROBLOX®**



In this hands-on, fully guided experience, Ninjas will learn the basics of game building and creative development in Roblox®, an exciting, online gaming platform. They will plan, design and build their own 3D world to create much more than just a game!

### **NINJA ROBOTICS WITH LEGO®**





This Camp will challenge Ninjas to use LEGO® Spike Prime robotics kits to design and build their own robots, ranging from a charging rhino to a dancing troupe. Ninjas will learn and apply the fundamentals of sensors, motors, and coding to construct their own wild creations!

Ninias will create and customize their own

YouTube channel using a shared Code Ninjas

channel art, profile pictures, video thumbnails,

and will also be guided through how to record, edit, and upload videos. Ninjas will analyze

YouTube Account. They will design unique

popular YouTube videos and learn about

takes to become a YouTuber!

copyrights and fair use to give them what it

### **LEGO® PYTHON ENGINEERS**

**CODE YOUR OWN ARCADE** 

Ages 8+



What do you get when you combine the world of engineering with computer programming? Robotics! This camp will use the LEGO® Education SPIKE™ Prime set. Ninias will learn the fundamentals of the Python Programming Language as they program each robot to navigate challenges and complete a variety of

### **CODE YOUR OWN CARTOONS** Ages 8+



Ninjas will learn how to express themselves and let their creativity shine through code as they work together to craft silly, scary, and exciting cartoons in Scratch—a kid-friendly, visual programming environment developed by MIT. Ninjas will level-up their knowledge of basic coding concepts as well as their storytelling abilities.

### **BECOME A YOUTUBER**

Ages 8+



**STOP MOTION ANIMATION** Ages 8+ Ninias will experiment with video production through a variety of mediums including

Claymation, LEGO® Minifigures and paper cutouts! Ninjas will work on various shorts ncluding magic trick illusions, a 3-part story and walking character animations! They will work independently on their videos and collaborate in teams during the entire design process

### **FUTURE MINDS AI ACADEMY** Ages 8+



As Artificial Intelligence (AI) becomes more present in every aspect of life, it is critical that our children have the tools and nderstanding to operate in this future orld. Ninjas will learn about the fundamentals of AI development and application through a variety of activities in coding, games, and robotics.

### **CODING ARCADE TYCOON**

### Ages 8+



This Camp gives Ninjas the opportunity to use micro:bit microcontrollers and Makey Makey circuit boards to create interactive games that combine electronics, sensors and sounds. They will spend the week harnessing the power of code and designing games to present a final Carnival for all Ninjas and their families to enjoy!

### **MINECRAFT® MODDING MASTERS**



Designed for Ninias who are experienced Minecraft® players, this Camp teaches them how to become game experience masters through customizations ranging from tools to weapons and enemies. Ninjas will be able to export their mods using Minecraft® Java Edition for their friends and family to enjoy at home.

### **MINECRAFT® MASTERY: REDSTONE** Ages 8+ **REALM** Designed for Ninjas who are expert Minecraft®



players, this Camp teaches them how to work with Redstone, the engineering block in Minecraft®. Redstone is used to automate a wide variety of features from farming and mining to flight simulation. Ninias will achieve the ultimate level of Minecraft® mastery, enhancing the knowledge of automation in game design overall.

## **ROBLOX® WORLD CREATORS**



This camp teaches Ninjas how to build and explore new worlds. Ninjas will program and create their own 3D Worlds to share with the Roblox® community locally and globally.

**SCAN** NOW

