

TREOBYTES

SUMMER LEVEL-UP



CAMP 2023
REVIEW

**ENGINEERING, STEM SPORTS + TECH, GAME
DEVELOPMENT, DJI ROBOTICS + DRONES, INFENTO,
STEMPRENUERS SMART CITY**



WHO ARE WE?



- **Treobytes is a 501(c)3 non-profit focused on under-represented communities and girls in the STEM fields.**
- **Founded in 2014, focuses on bringing technology into the hands of all students.**
- **We emphasize teaching and mentoring students of all backgrounds in non-conventional learning environments.**
- **Our project-based curriculum breaks down the fundamentals of computer engineering, computer science, technology, engineering, art, and mathematics.**



STEM FUN STEM FUN STEM FUN STEM FUN STEM FUN

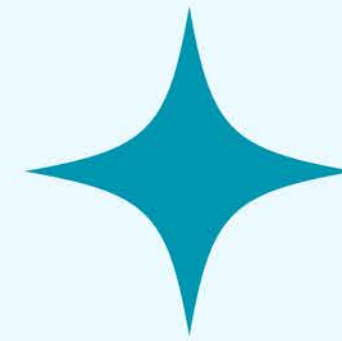


STEM FUN STEM FUN STEM FUN STEM FUN STEM FUN



OUR WORK

SUMMER 2023



OVER
1000
STUDENTS

PROVIDED

6

DIFFERENT
COURSES

OVER THE
SPAN

7

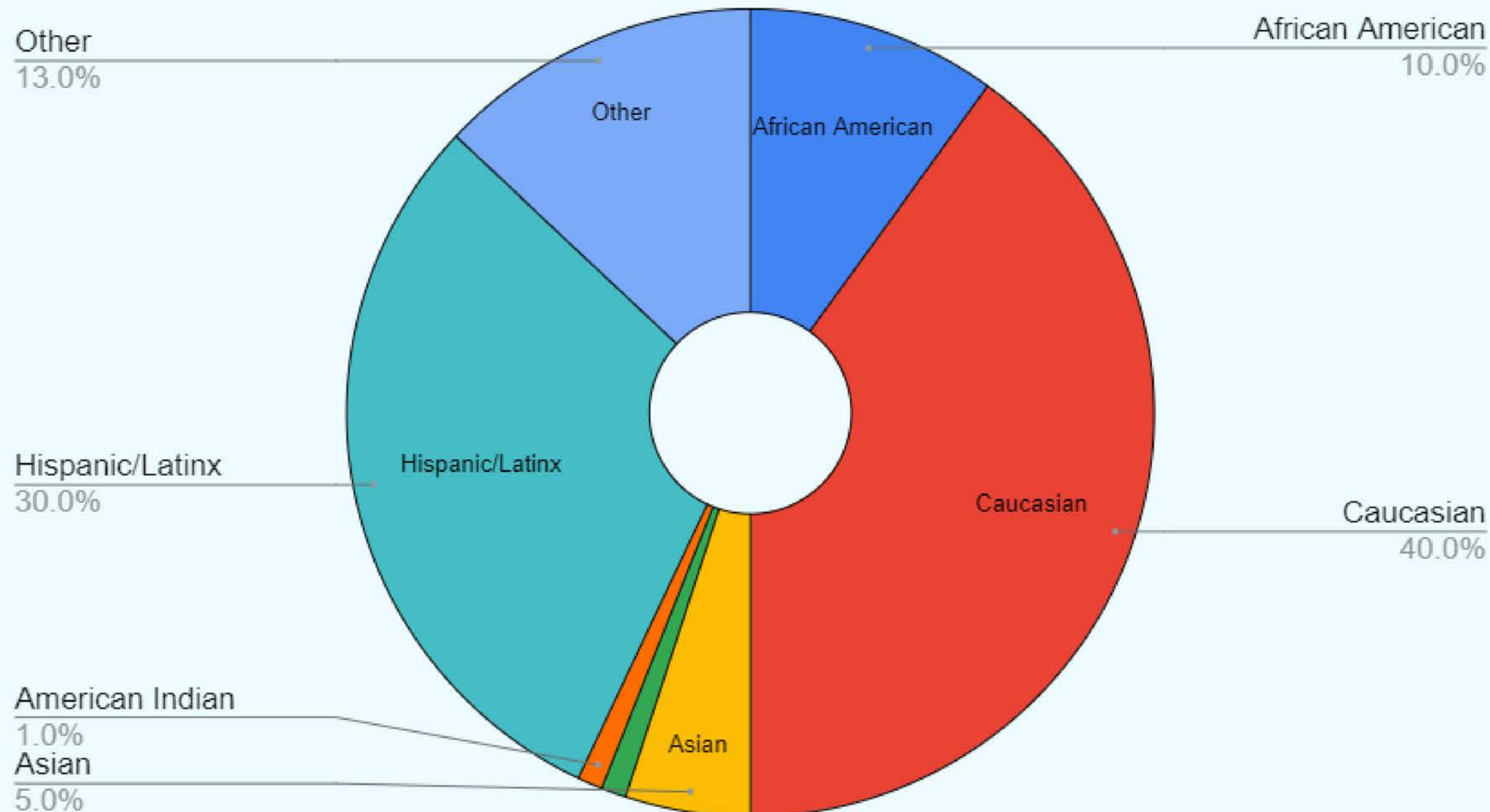
WEEKS



OUR STUDENTS

SUMMER 2023

Treobytes Level Up 2023 Summer Camp Group Distribution



FEMALE

29%

222 STUDENTS

MALE

71%

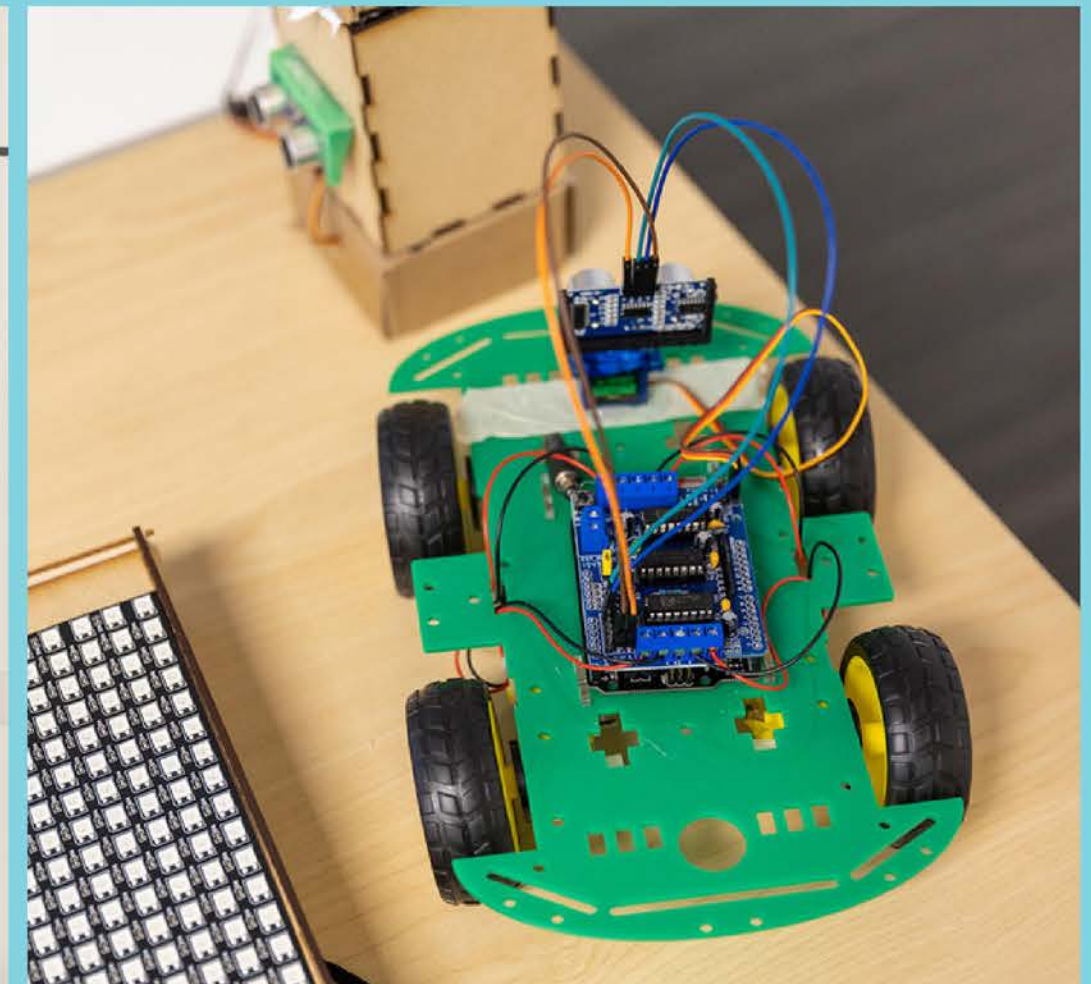
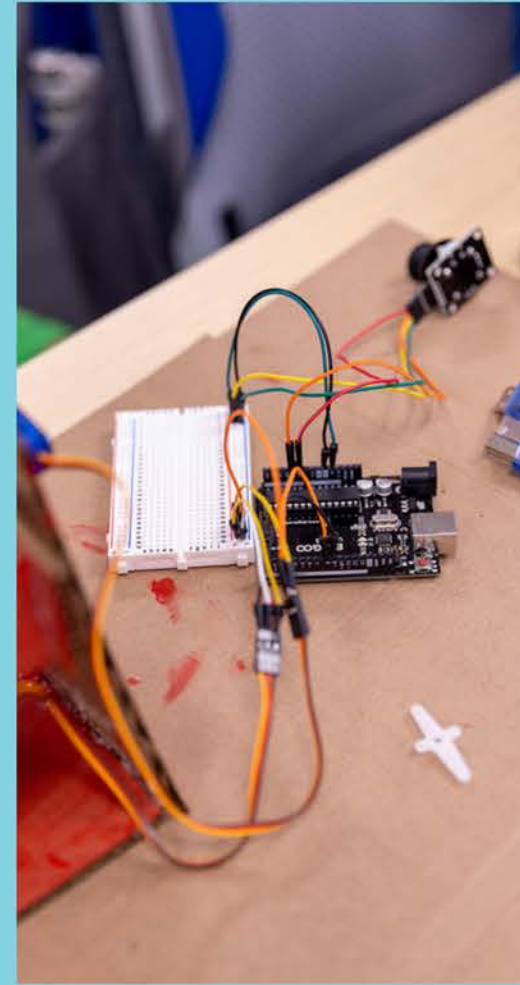
778 STUDENTS

ENGINEERING 101

ENGINEERING 101 EXPLORES THE PROCESS OF SOLVING CHALLENGES THROUGH BUILDING HANDS-ON ENGINEERING PROJECTS.

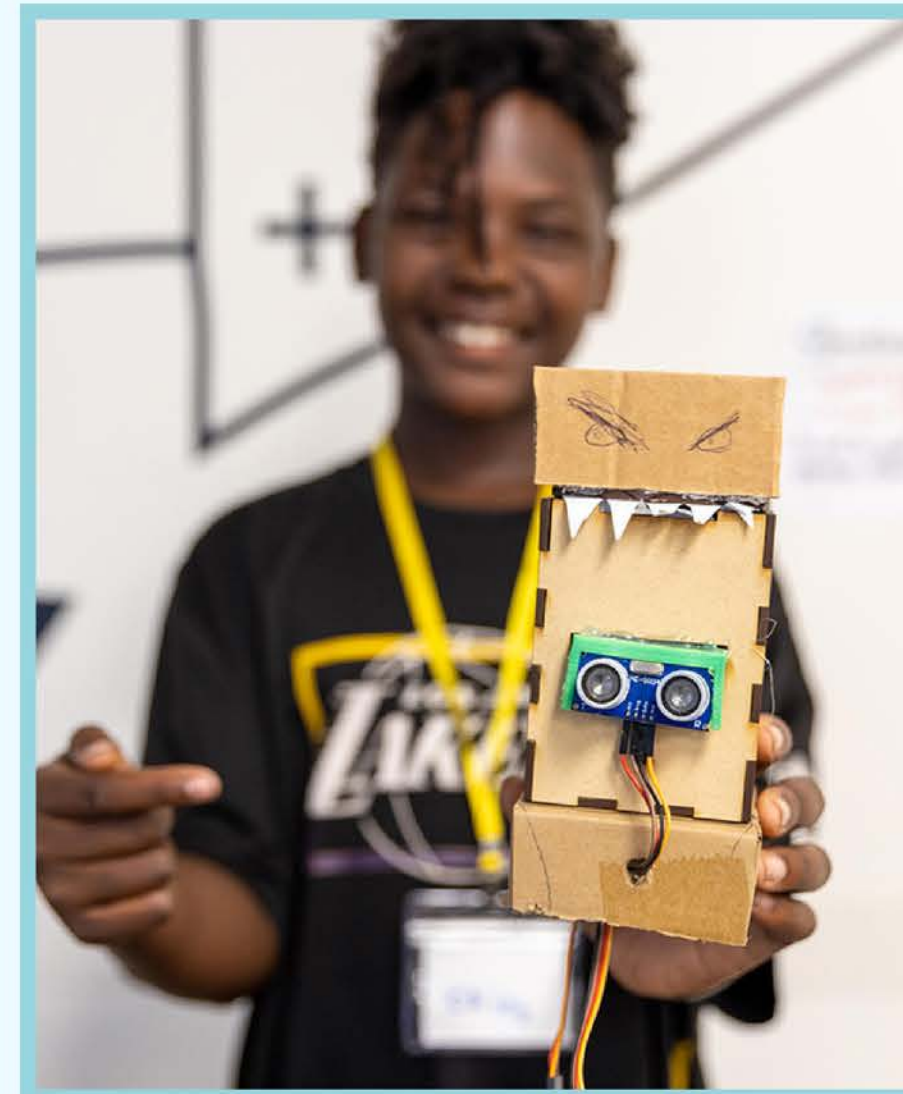
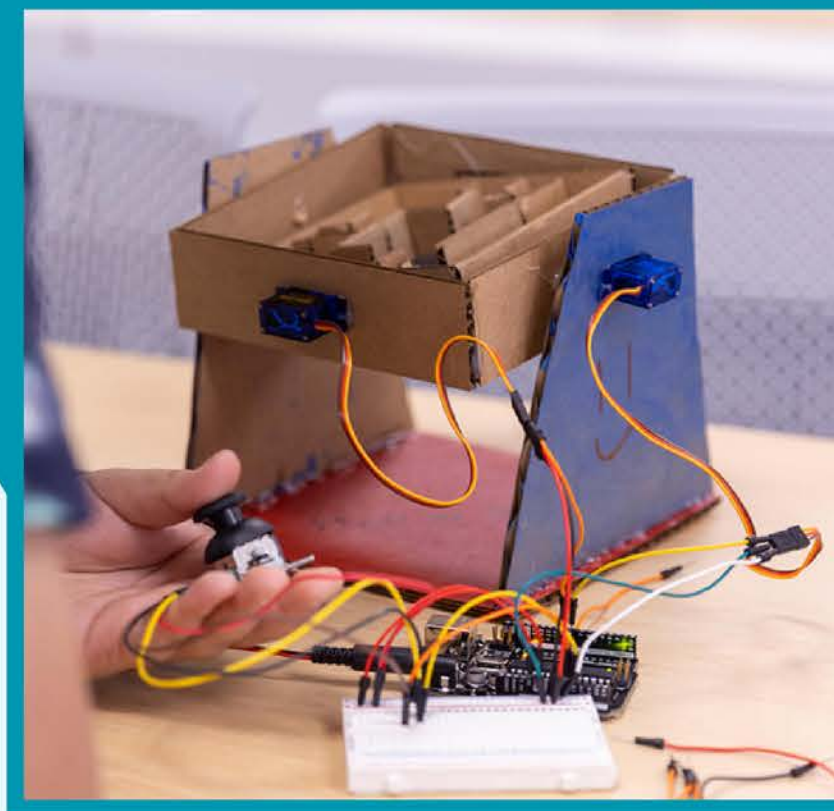


In **Engineering 101**, students embarked on an exciting journey to explore the fundamentals of Arduino technology and its practical applications to real-world challenges. Through hands-on experiences, they learned the art of coding and programming, allowing them to bring their innovative ideas to life. The course delved into the fascinating realm of structures and aerospace engineering, providing insights into designing and building robust systems.



ENGINEERING 101

PROJECTS



GAME DEVELOPMENT AND DESIGN

GAME DEVELOPMENT AND DESIGN
INVOLVES DESIGN, AUDIO, SOUND,
CODING, SCRIPTING, AND NARRATION.

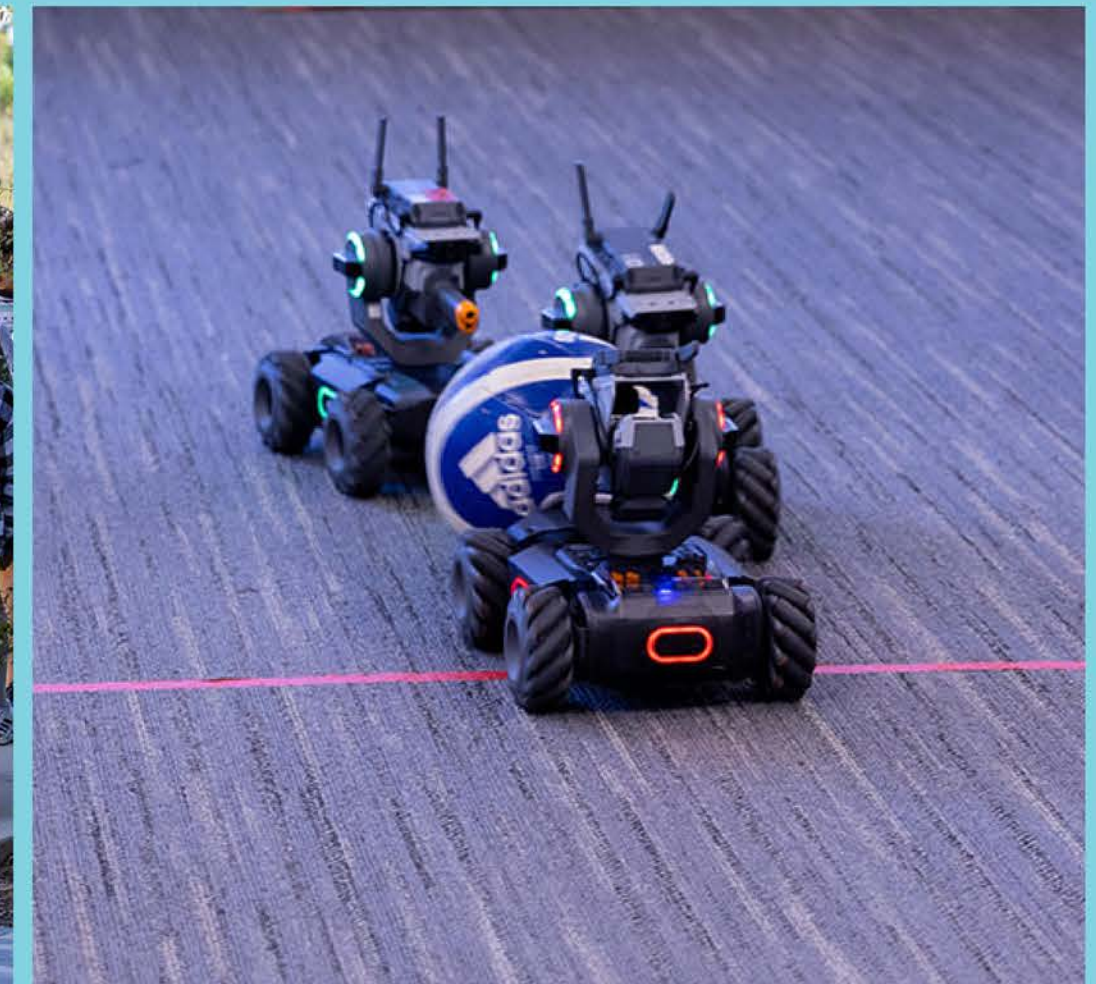
Over the course of this summer, the young learners delved into the captivating realm of Game Development and Design, embarking on an immersive educational journey that encompassed a wide array of creative disciplines. Guided by expert instructors, they had the opportunity to explore the multifaceted world of video games, unraveling its intricate layers of design, audio, sound, coding, scripting, and narration.



DJI ROBOTICS + DRONES

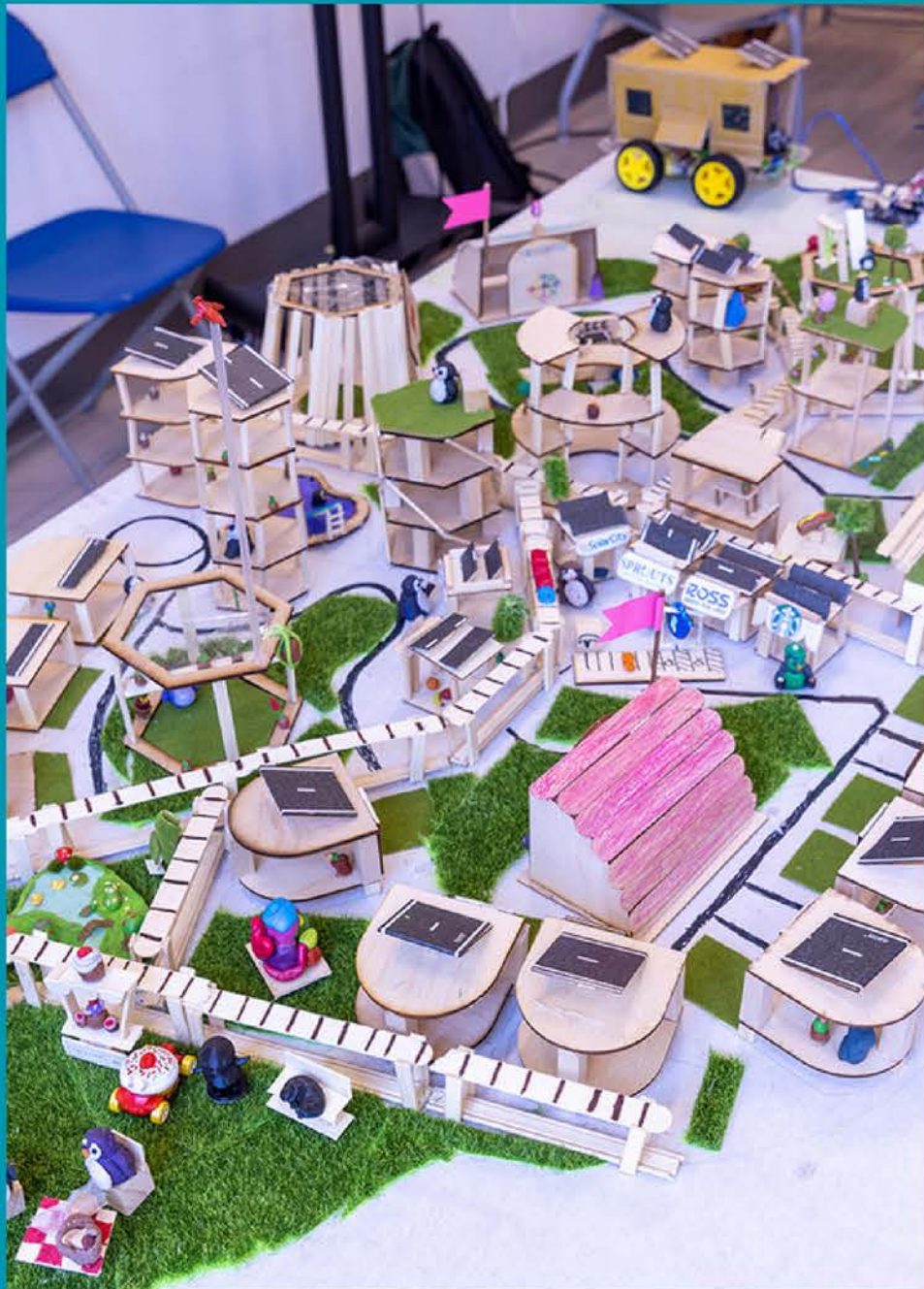
INSPIRED BY DJI'S ANNUAL ROBOMASTER ROBOTICS COMPETITION, THE S1 PROVIDES USERS WITH AN IN-DEPTH UNDERSTANDING OF SCIENCE, MATH, PHYSICS, PROGRAMMING, AND MORE THROUGH CAPTIVATING GAMEPLAY MODES AND INTELLIGENT CODING FEATURES.

The RoboMaster S1 marks a groundbreaking advancement in educational robotics, skillfully crafted to unlock the hidden potential in each student. Inspired by DJI's esteemed RoboMaster robotics contest, this track delved into diverse subjects like science, math, physics, and programming. With engaging gameplay modes and inventive coding tools, it cultivates an immersive and enlightening learning journey. Additionally, participants had the opportunity to program Tello Drones, adding an extra layer of hands-on experience.



STEMPRENUERS SMART CITY 1.0

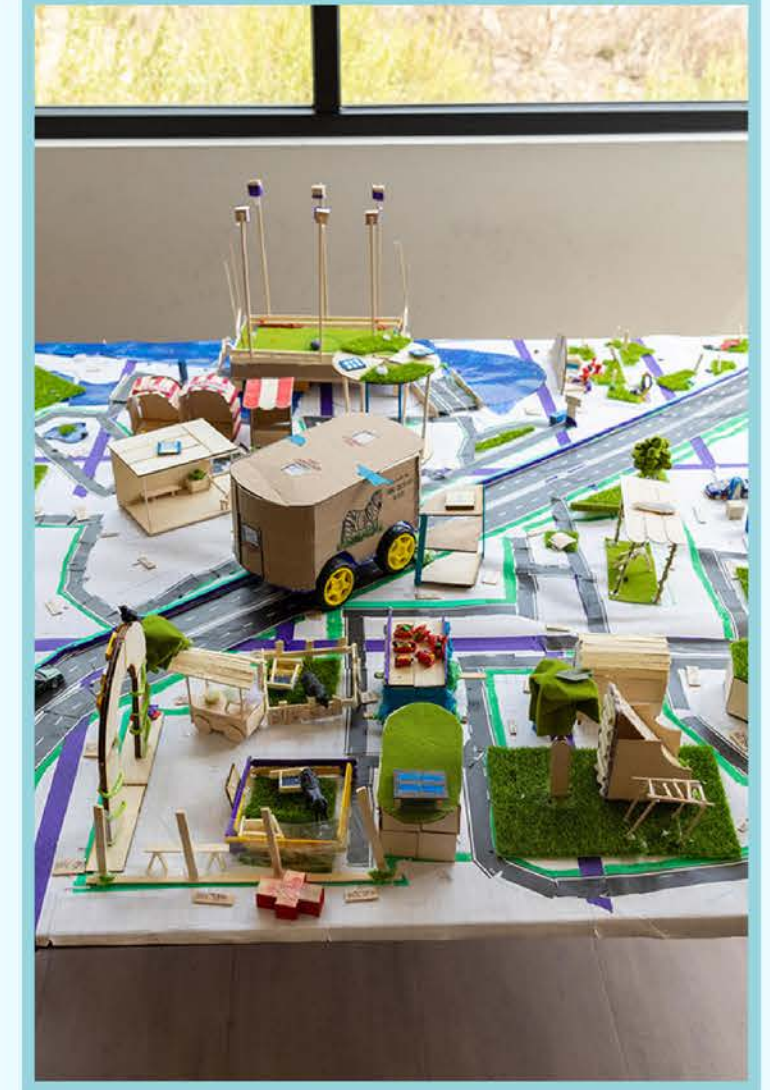
THIS CAMP TAKES STUDENTS THROUGH VARIOUS STEM DISCIPLINES TO CREATE A 3D SCALABLE SMART CITY BLOCK. STUDENTS WILL ALSO LEARN ABOUT SUPPLY CHAIN MANAGEMENT, MANAGING BUDGETS, PERMITS, AND PROJECT TIMELINES.



Guided by their insatiable curiosity, these budding engineers undertook the ambitious task of constructing a cutting-edge 3D scalable Smart City Block, a testament to their innovation and creativity. Through hands-on activities, engaging workshops, and collaborative projects, our campers delved into the realms of science, technology, engineering, and mathematics, honing their skills in a dynamic and interactive learning environment.

STEMPRENUERS SMART ✨

CITIES ✨





STEM SPORTS + TECH

UTILIZING AN INTERACTIVE TECHNOLOGY ECOSYSTEM, THIS CAMP BUILDS A STUDENT WELLNESS PORTFOLIO (DAILY-TO-YEARLY, DELIVERING HEART RATE DATA, REFLECTIVE JOURNALING, AND PERFORMANCE METRICS) THAT CAN CORRELATE TO ACADEMIC, SOCIAL, AND EMOTIONAL GROWTH.

Throughout the camp, students had the opportunity to develop a comprehensive wellness portfolio. This portfolio, ranging from daily to yearly assessments, captured essential data such as heart rate information, reflective journal entries, and performance metrics. These valuable insights were not only significant in terms of physical health but also proved to be instrumental in tracking academic progress, social development, and emotional growth.

INFENTO

INFENTO HAS MODULAR PARTS FOR STUDENTS TO CREATE LIFE-SIZE VEHICLES AND SCIENCE BUILDS.

This summer, students had an enriching and engaging learning experience with Infento, a program designed to foster investigative learning through design and technology. Throughout the program, our campers had the opportunity to explore their creativity, develop technical skills, and create tangible projects in a fun and educational manner. By participating in this unique track, students learned how to approach challenges with an innovative mindset.





trē.o.bytes

Engineering and Technology Hub

THANK YOU!
→ **QUESTIONS?**

