

Robotics AND Beyond

Since 2004, inspiring young minds in STEM and design for 20 years

501(c)3 IRS 20-8821398

EXECUTIVE OVERVIEW

October, 2023

OUR VISION AND MISSION

We believe in the natural talents and potential of every human being, and their desire to discover and develop their greatest talents and lead fulfilling and happy lives.

In the fields of technology, science, engineering and design, Robotics And Beyond provides youth and young adults with opportunities to discover talents, develop skills, and envision careers and education paths to their futures. We do this in an environment that embraces setbacks, critical thinking and creativity, and provides outstanding role models, leadership experience, confidence and career opportunities. For those with learning, social fluency and other social and demographic challenges, we help reveal phenomenal talent and energy that has simply lacked the opportunity to emerge. We strive to help young people pursue fulfilling careers, give back, and become models for future generations.

STUDENT POPULATION k-12, college, adults

REACH AND IMPACT

Robotics And Beyond draws students from a 60-mile radius, from over 50 towns in western CT, eastern NY and NY City, typically serving 500-600 individuals per year.

From 2004 through 2023, Robotics And Beyond has achieved the following milestones:

2,000+ individuals served	24,000+ peer-mentoring experience hours
70% student return rate	28,000+ adult volunteer hours
74,000+ student learning hours	30,000+ student volunteer hours
55 topics taught by 172 peer-instructors	34 internships provided

OUR GOALS:

Solidify our operations and sustainability to serve another full generation of young minds,
Increase our impact regionally and define and publicize our model for broad and affordable adoption.

SUPPORT NEEDED

We require funding to prepare our model for adoption by other regions and organizations, and sustaining funding for key operational staffing roles. Our goal for 2023-2025 is to obtain \$60-80k average per year of support from individual donors, businesses and foundations, and leverage that to obtain another \$30-40k through program grants and from grassroots donors during our fundraising campaigns. Funds for tuition assistance needs are met by specific program sponsorships and fundraising events.

Robotics And Beyond

INSPIRING MINDS IN STEM AND DESIGN

INSTRUCTOR BASE

90% of our instructors are peers to our student base, attending public and private high schools, homeschool groups, and colleges and universities. This approach has been among the most impactful of all aspects of Robotics And Beyond, providing life-changing experiences in responsibility, empathy, communication skills and leadership. Many of our former instructors have stated that their work as a peer-mentor and instructor was the most valuable pre-college experience of their life and essential to their success in college or career training programs and in their careers. Potential peer instructors are often identified as early as grades 5 or 6 and provided with gradually increasing opportunities to mentor and instruct, ultimately creating their own versions of program and lesson plans, then helping to train a new generation of instructors. Compensation to peer instructors typically reaches \$15-20k per year, contributing to often urgent personal and educational needs. Adult instructors include retired professionals (paid and unpaid), volunteer professionals in various careers, and staff of other educational nonprofits.

TECHNICAL TOPIC EXAMPLES

Electronics and electrical engineering; mechanical engineering; machine and product design and control; prototyping; software engineering; server systems; A-I and machine learning; aviation and drones; robotics; web development; computer hardware engineering; mathematics; graphic design; graphic art and animation; architectural design; game design.

DELIVERY

In-house classes and programs for students: after-school, weekends, evenings, vacation days, summer camps, single-day workshops, multi-week classes.

Off-site classes and programs: at libraries, social service agencies, home school networks, public and private schools, scouting groups; professional development for teachers in public schools.

Public service: collaborate with other nonprofits, libraries and schools to provide services and joint programs; create exhibits and lectures and interactive events; provide refurbished computers and computer servicing to families in need; connect students with adult mentors; guide students and parents in career and education paths.

Business community: provide candidates for internships, apprenticeships and part-time/summer jobs and full-time positions.

FOUNDERS AND HISTORY

Robotics And Beyond was founded in 2004 by Michael Morrissey and Paul Chayka as a way to provide meaningful experiences in science, engineering and technology during summer vacations for students in elementary through high school. From 14 attendees in one week of summer camp, Robotics And Beyond has grown to full-year programs serving 500+ individuals per year from over 50 towns in a 60-mile radius of New Milford, CT.

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