



Applied Computing Foundation

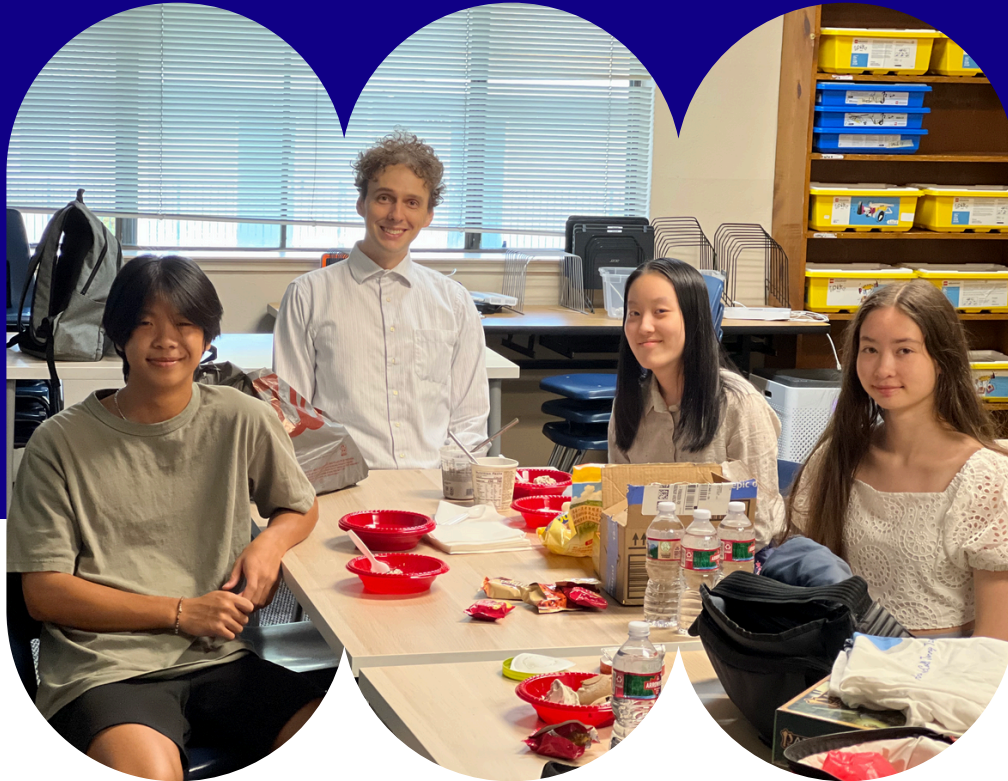
# YOUR TECHNOLOGY EDUCATION PARTNER

*Building Future STEM Leaders with Applied Computing*

- 📍 Silicon Valley, CA
- 📞 480-200-9799 | 650-567-6487
- 🌐 [www.applied-computing.org](http://www.applied-computing.org)



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# CEO's Message

*"Greetings to you all,*

*Applied Computing Foundation has been empowering students to pursue their entrepreneurship projects over a long period of time, not just in short bursts. By doing so, future STEM leaders will learn how to collaborate, apply their technical skills, and, most importantly, how to handle failure through intense competitions, technical prototyping, team collaborations, and community outreach.*

*Challenges and risks are numerous and constantly present. However, they don't fail at what's most critical: building "inner confidence" that they can work with a team towards a shared goal, no matter what. In essence,*

*ACF aims to instill these core values through technology, entrepreneurship, and sustainability, as these are crucial for both individuals and society to thrive and make a true impact in life."*



*Yoonjung Lera,  
CEO & Co-Founder.*

# ACF Mission



Applied Computing Foundation (ACF) is a thriving community that inspires and empowers students, young innovators, and their communities through technology, creativity, and entrepreneurship. ACF builds bridges from the classroom to the real world.

ACF fosters a teen tech entrepreneurship community where creativity and a passion for making the world a better place thrive. ACF organizes structured team development by sharing best practices and celebrating successes and teachable moments within the community.

ACF encourages and supports students to participate in science fairs, competitions, hackathons, game jams, and similar events, where they learn to collaborate in teams and create innovative solutions. The organization also offers internship opportunities through partnerships with other mission-driven organizations in the community.

LIVE  
COHORT  
LEARNING

REAL LIFE  
PROBLEM  
SOLVING

PROJECT-  
BASED  
LEARNING

INQUIRY  
BASED

LEADERSHIP

GLOBAL  
ACF STARTUP  
COMMUNITY



# 2023 - 2024 Accomplishments

## DIAMOND CHALLENGE

Regional Finalist- BerriBasket: Rowan Tiska (11th), Kevin Kim (11th), Minook Jung (11th), Livia Pathakamudi (9th)

## CONRAD CHALLENGE

Conrad Challenge (Energy & Environment) Alternate Finalist- EcoHero

Semi-finalists-

- **BerriBasket:** Rowan Tiska (11th), Kevin Kim (11th), Minook Jung (11th), Livia Pathakamudi (9th)
- **CityPlug:** William Sahami (11th), Harrison Zhu (11th), Seungcho Lee (11th), Sooa Kim (11th)
- **enVibrant:** Jinny Cha (10th), Smera Jain (10th), Christine Lee (10th)
- **Noteblast:** Adelle Kang (10th), Aminjin Battulga (10th), Hyunwook Choi (11th), Jeffrey Fan (10th)
- **Peace of Mind:** Julia Kang (11th), Marrisa Fang (11th), Chloe Choi (9th)



## CONGRESSIONAL APP CHALLENGE

17th District Winner- BerriBasket: Rowan Tiska (11th), Kevin Kim (11th), Minook Jung (11th), Livia Pathakamudi (9th)

## FUTURE IMPACT CHALLENGE

- **Grand First Winner- CityPlug:** William Sahami (11th), Harrison Zhu (11th), Seungcho Lee (11th), Sooa Kim (11th)
- **Grand Third Winner- Peace of Mind:** Julia Kang (11th), Marrisa Fang (11th), Chloe Choi (9th)
- **Honorable Mention- BerriBasket:** Rowan Tiska (11th), Kevin Kim (11th), Minook Jung (11th), Livia Pathakamudi (9th)
- **Honorable Mention- Noteblast:** Adelle Kang (10th), Aminjin Battulga (10th), Hyunwook Choi (11th), Jeffrey Fan (10th)

Finalists-

- **Eco Hero:** Alvin Kang (10th), Dohyun Yang (10th), Jarron Lei (8th)
- **Electronic Donkeys:** Kai Park (11th), Tony Chung (10th), Alex Kang (9th)
- **enVibrant:** Jinny Cha (10th), Smera Jain (10th), Christine Lee (10th)

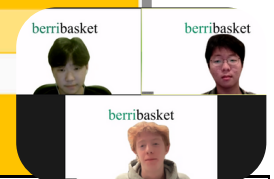


## BLUE OCEAN COMPETITION

Top 30 Winner- BerriBasket: Rowan Tiska (11th), Kevin Kim (11th), Minook Jung (11th), Livia Pathakamudi (9th)

## 15 17 SUMMIT: ESCAPE FROM CAPTIVITY

Grant Winner, BerriBasket: Rowan Tiska (11th), Kevin Kim (11th), Minook Jung (11th)



## MODEL ENTREPRENEUR COMPETITION

Finalists-

- **CityPlug:** William Sahami (11th), Harrison Zhu (11th), Seungcho Lee (11th), Sooa Kim (11th)
- **enVibrant:** Jinny Cha (10th), Smera Jain (10th), Christine Lee (10th)
- **Peace of Mind:** Julia Kang (11th), Marrisa Fang (11th), Chloe Choi (9th)
- **Electronic Donkeys:** Kai Park (11th), Tony Chung (10th), Alex Kang (9th)



# Previous Accomplishments

**2022**

- **1517 Medici Grant Winner, Summit Winner- CityPlug:**
- William Sahami (11th), Seunggho Lee (11th), Harrison Zhu (11th)
- **Diamond Challenge, Semi-Finalist- PyroTamer:**
- Daniel Cha (12th), Jaein (Jane) Kim (11th), Jermaine Lei (11th), Matthew Lee (11th)
- **Diamond Challenge, Region Finalist- iDENTify**
- **Conrad Challenge (Energy and Environment) 2022 "Power Pitch" Winner- PyroTamer:**
- Daniel Cha (12th), Jaein (Jane) Kim (11th), Jermaine Lei (11th), Matthew Lee (11th)

**2021**

- **Synopsys Science and Technology Championship** (Juno Kim, Rishi Ananda, Julia Kang)
- **Model Entrepreneurship 1st place** (VOBYUS)
- **Diamond Global Semi Finalist** (Applicada)
- **Diamond Western Regional Finalists** (VOBYUS, FalconUpInvest)
- **BLUE OCEAN 100** (R2H)

**2020**

- **Conrad Challenge Semi Finalists** (R2H, VOBYUS, Deftsign, Applicada)
- **Synopsys Science and Technology Championship2020** (Minjeong Kim)
- **San Mateo STEM Fair** (Allen Bryan)
- **Diamond Western Regional Finalists** (Deftsign, Lucidity, OnTrack)
- **Conrad Challenge Finalist** (Lucidity)

**2019**

• Our students bring us great honour, accolades, and hope for a better future, through their heartfelt efforts.

**2018**

• Entire List of Achievements

•  
•

[here](#)

# ACF Programs

## 1:1 TECH BUILDING

Learn how technology works by joining our 1:1 online coding foundational class. You can choose from among web programming, game development, Python, Java, or AI/ Data Science tracks. This class is perfect for beginners or intermediate students who want to build their foundational skills.

## GAME DEV. TEAM

This program is recommended for middle school students who have completed one or more foundation-level tracks. The students can enhance their coding skills while having fun with game development. This experience combines creativity, programming, teamwork, Math, and leadership. It is an exciting way to engage students in developing their technical and leadership skills.

## SUMMER CAMPS

Sometimes, the long summer break is the best time to fully immerse yourself in learning. ACF offers a range of topics, including website building, tech startups, AI, cybersecurity, and more, during the summer break. After the summer camp, students will have the opportunity to move on to regular programs.

## STARTUP TEAM

This is the highest and most advanced path offered by ACF for students who have demonstrated their abilities as team players, community builders, technology explorers, and problem-solvers. To apply, students must have effective leadership skills, excellent communication skills, and competent technical abilities.

## USACO/ACSL/AP CS

The USACO or ACSL class provides a great opportunity for students to use their coding skills to solve problems in Data Structures and Algorithms. We offer private coaching classes along with group classes to help middle and high school students improve their programming abilities.



*The above are namely our online tracks. We also offer year-round in-person classes. Check out our "Robotics" section.*

# Students' Pathways

## FOR BEGINNERS

- SCHEDULE 1:1 TRIAL
- CHOOSE A TRACK
- COMPLETE MULTIPLE LEVELS

## FOUNDATIONAL COURSES

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## APPLIED LEVEL COURSES

- COMPETITIONS
- TEAM CLASSES
- INTERNSHIPS

## 5TH. - 8TH. GRADERS

- PYTHON + MATH GAME TEAMS
- SCIENCE FAIRS
- JUNIOR STARTUP TEAMS

## 8TH. - 12TH. GRADERS

- STARTUP TEAMS
- TEEN INTERNSHIPS
- USACO/ ACSL
- AP CS PREP

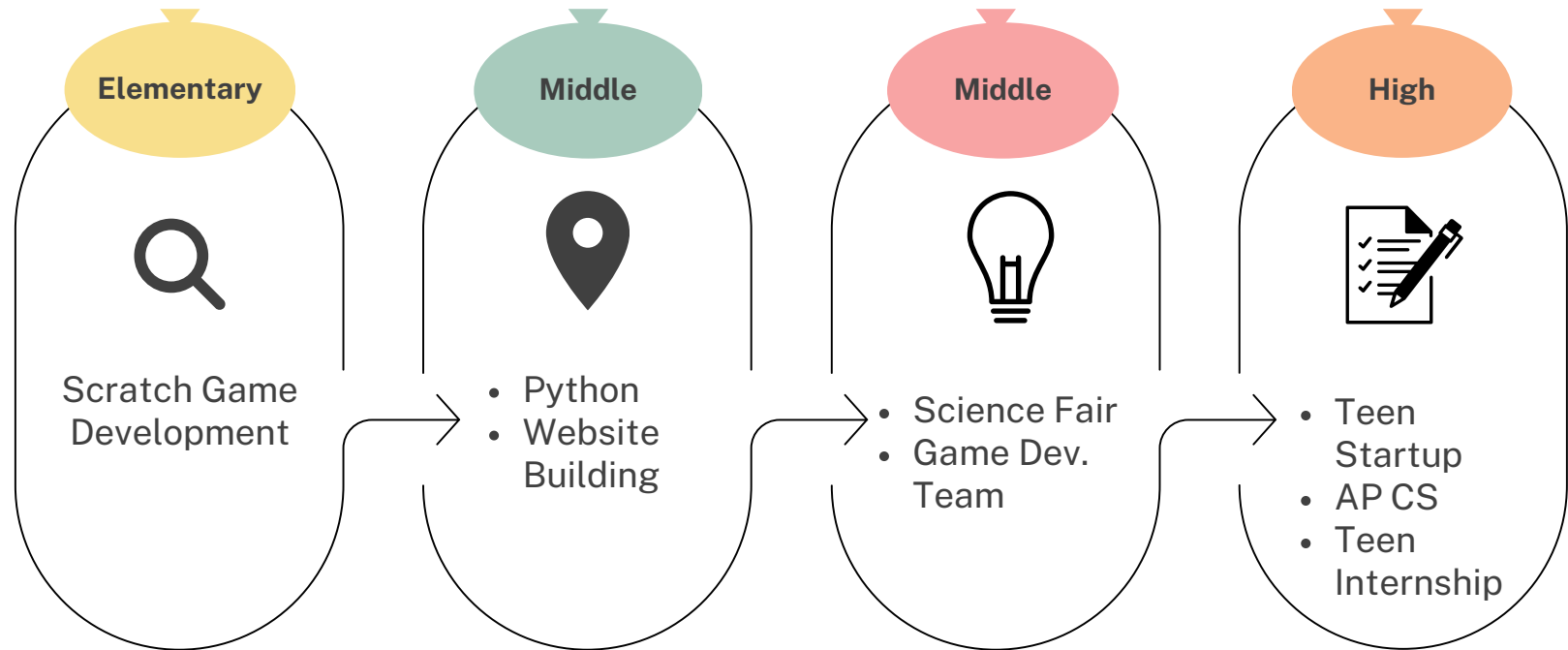


Students with prior coding experience can apply directly for advanced-level classes. An interview process or trial class will be conducted to ensure a good fit.

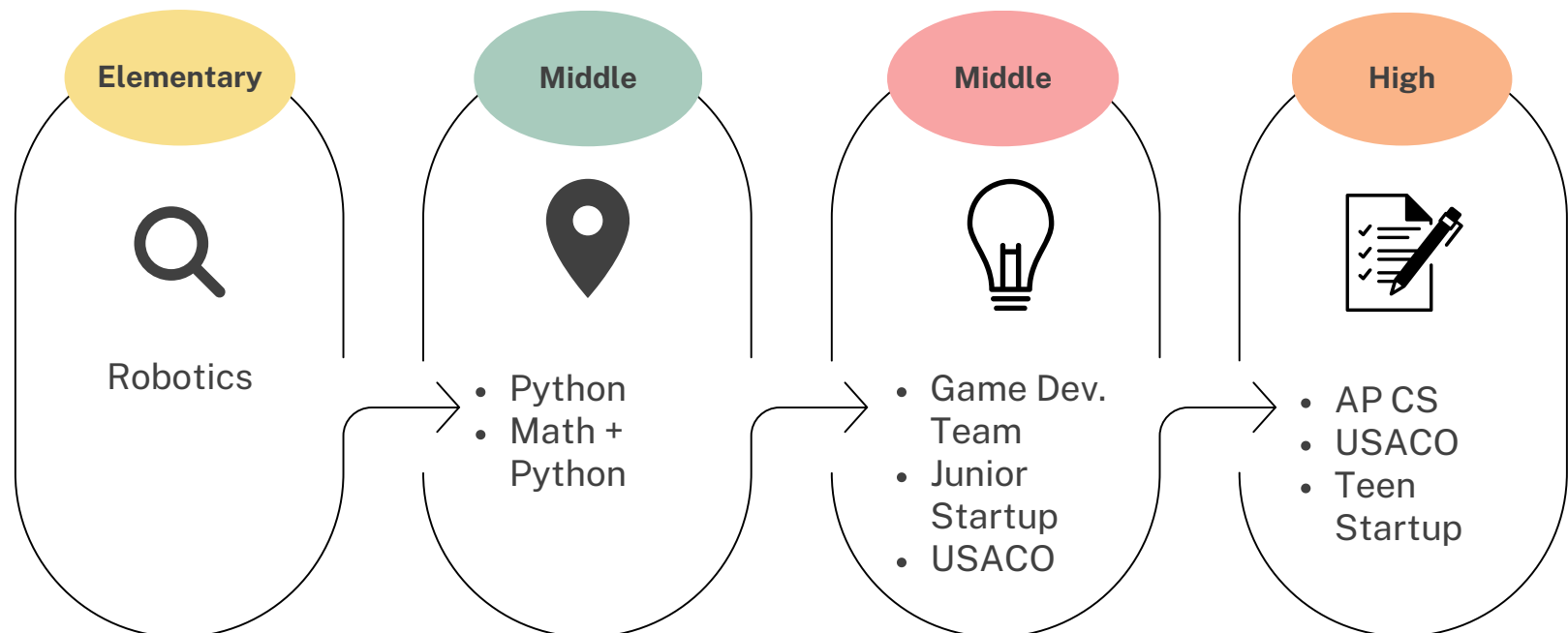


# ACF STEM Pathway Examples

## Emily's Pathway



## Ashan's Pathway



# 2024 Event Calendar

Event	Description	Timeline
Eco City Camp	Sustainability-themed entrepreneurship camp with Korean students visiting the Silicon Valley.	Jan. - Feb., 2024
Future Impact Challenge	An international Teen Tech Entrepreneurship competition hosted for middle and high school students aged 13 - 19 to promote sustainable innovation.	Jan. - May, 2024
SVTTT 11th. Summit	Silicon Valley Teen Tech Talks features workshops and mentoring sessions by global technical innovators and Gen Z ambassadors.	Mar. 17, 2024
Korea & Asia Summer Camp	An international summer camp hosted by ACF in Jeju, South Korea that aims to bring technical innovation from Silicon Valley to the doorstep of Korea, blend the rich STEM and entrepreneurship cultures of both countries, and empower ambitious teens!	Jun. 2024
Bay Area Summer Camp	Summer camps in the heart of Silicon Valley, teaching in-person robotics and virtual Game Development, Science Fair, Website Building, Mobile App Development, AP CS classes, and more!	Jun. 3 - Aug. 9, 2024
Eco City Camp	Sustainability-themed entrepreneurship camp with Korean students visiting the Silicon Valley.	Jul. 2024
MACathon	Stepping away from the restriction of one themed app per month, this is an opportunity to work on your favorite open project while competing for prizes.	Aug. 2024
Game Impact Challenge	This is a fantastic opportunity for all Pygame teams (as well as non-ACF teams) to present their games live, host game nights, and have a fun celebration week for ALL.	Sep. 2024
Scratch Sustainability Summit	A yearly summit through which we inspire environmental awareness and provide a platform for Gen Z Scratch coders and impactors to portray creativity.	Oct. 2024
Panama Eco City Camp	Sustainability-themed entrepreneurship camp with Panama students visiting the Silicon Valley.	Early Nov. 2024
SVTTT 12th. Summit	Silicon Valley Teen Tech Talks features workshops and mentoring sessions by global technical innovators and Gen Z ambassadors.	Nov. 2024
Winter Camp	Winter camps in the heart of Silicon Valley, teaching virtual Game Development, Science Fair, Website Building, Mobile App Development, AP CS classes, and more!	Dec. 2024



# Foundational Programs

Each track consists of 2 - 3 levels. Students will build a Capstone project for each level and start to build their own coding portfolio.

**SCRATCH  
GAME  
MAKING**

**LEGO  
ROBOTICS**

**WEB  
DEVELOP-  
MENT  
HTML/CSS/  
JAVASCRIPT**

**PYTHON**

**AI/  
DATA  
SCIENCE**

**LEGO  
ROBOTICS**

**ARDUINO**

**MINDSTORM  
ROBOTICS  
COMPETITION**

**UNITY**

**JAVA**

# Robotics

The Applied Computing Foundation is an official regional host for the World Robot Olympiad (WRO) and First Lego League (FLL).

## Benefit of Exposure to Robotics

- Robotics is an interdisciplinary domain that studies robots, where engineering, technology, and science intersect.
- Robots are in our future.
- Robotics teaches kids complicated concepts with ease.
- Robotics compliments coding.
- Robotics helps to develop various practical skills, including design thinking, creativity, confidence, and teamwork.
- Playing with robots prevents kids from saying, 'I don't understand technology!'
- Understanding robotics brings kids closer to the physical world.
- Robotics is so much fun for kids!

### SUMMER CAMP

- Small classes.
- Experience camp coaching.
- Program designed to get students ready for the next step in STEM.

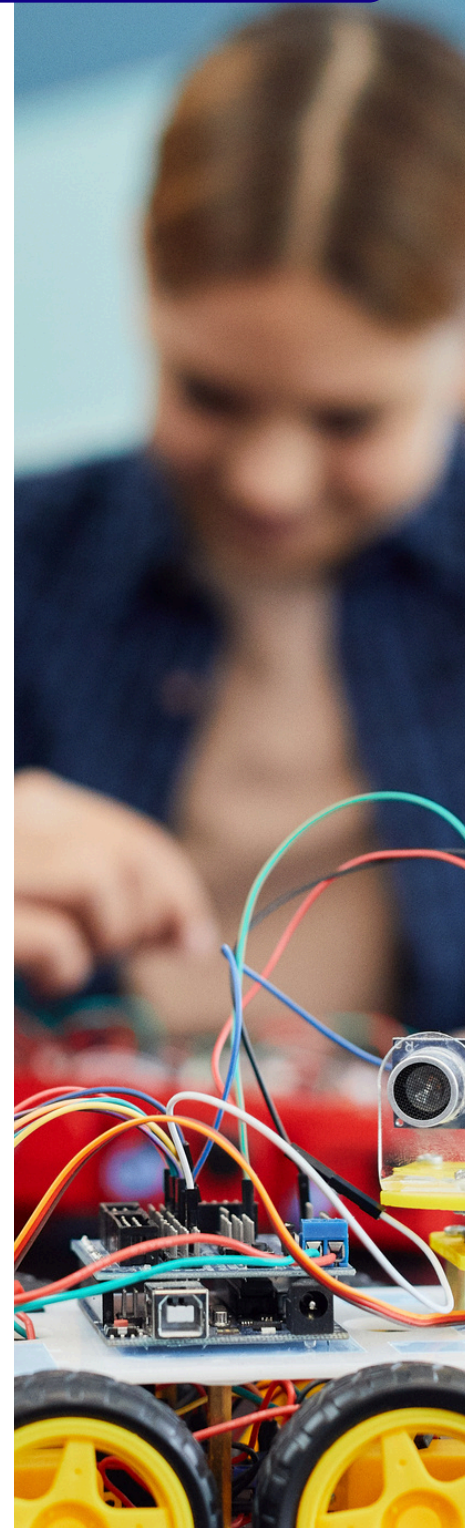


### FLL TEAM

### WRO TEAM

### SCIENCE FAIR

### STARTUP TEAM





# 2024 - 2025 Robotics Programs

## Summer Camps

- Junior Lego Robotics
- Lego Robotics Superstar
- Advanced Lego Robotics
- FLL Competition Camp (Experience previous seasons of challenges)
- Arduino

## Afterschool Programs

- We bring our program to schools. Please contact us at [afterschool@applied-computing.org](mailto:afterschool@applied-computing.org) if you are interested.
- Year-round afterschool programs at **Los Altos Christian School**, **Challenger School (Middlefield)**, **Challenger School (Strawberry Park)**, and **Challenger School (Berryessa)**.

## FLL Competition Teams

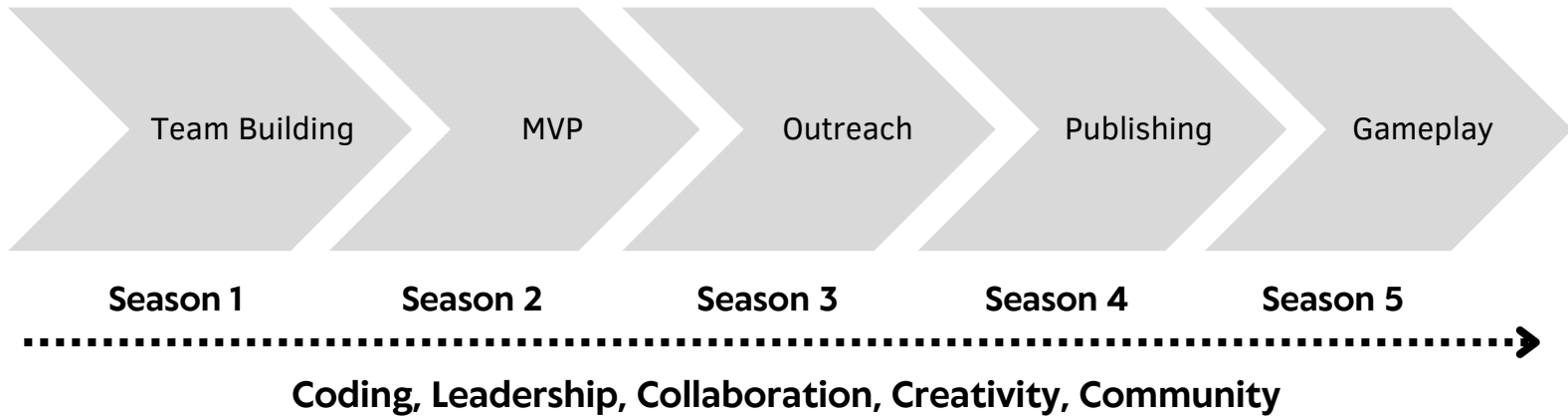
- Join our FLL team tryout in May and August.
- Recreational league/ Competitive league teams are open.

## Startup Team

High school teen startup teams combining robotics to create their solutions. Meet "Electronic Donkey" Team.



# Game Development Teams



## Perks of Game Development

The Game Development Team is an opportunity for students to apply what they learn in foundation skill-building classes. Alongside their mentor, students work in small groups of two to create an awesome game together!



# Junior & Teen Startup Teams

## Year 1

- **Team Building**
- **First MVP Launch**
- **FIC**
- **Apply to global Entrepreneurship Competitions for experience.**

Expect the first year to be focused on practicing both technical and non-technical skills, while also building a visible project as a team. Team members should discuss their project goals, plan and complete tasks, update each other on their progress, and work together to produce collaborative work products.

## Year 2

- **Solid Prototype**
- **Building Strong Leadership and Teamplay Skills**
- **Applying to Global Entrepreneurship Competitions as a Serious Contender.**

Expect the second year to be focused on intensive work that requires perseverance, technical execution, problem-solving, and prioritization skills. Team goals should be much more precise in the second year, after the recognition of the initial prototype and receipt of feedback from outside the team.

## Year 3

- **Market Launch**
- **Community Building**
- **Business Leadership Establishment**

Expect the third year to be focused on pushing the project beyond the scale of a small team. Depending on competition and the nature of the project, the team may file for patents, establish robust technical infrastructure, manage finances, and set up legal entities in order to launch more realistic business operations.



# Student Internships

Student internships at ACF are a fantastic way to experience first-hand the empowering nature of our community and to see the tangible impact that our interns can make in real-time. Our interns play a significant role in imparting technical knowledge, increasing community outreach, and having an essential role in the decision-making of the team they join.

Interns can earn "volunteer hours" credit that can count towards a Congressional or Presidential award. Students are encouraged to volunteer with their family members too!

**Who can apply:** *High school students (9th. - 12th. Grade), or equivalent homeschool*

**Application period:** *Year-round*

**Application link:**

<https://forms.gle/7zzKR3Pa5YAwn1oj6>

## **DEVELOPER INTERN: MONTHLY APP CHALLENGE**

- LIVE coding workshops every Saturday at 11:00 a.m. PT with global participants.
- A different-themed challenge every month.
- Get certificates for participating, or even win a prize after judging.
- Perpetual culture of building coding skills to become a M.A.C. Developer.



## **TECH TALK INTERN: SVTTT**

- SVTTT Interns strive to inspire the next generation of innovators with real-life examples.
- Through Silicon Valley Teen Tech Talks, they want to lead by example, showing youth firmly established leaders in the industry and among their peers. SVTTT is held twice a year, celebrating an unique theme.





# More Student Internships

## **STAFF WRITER INTERN: SPLASHGROUND**

- Bi-weekly newsletter.
- Their team name originates from two words: "Splash," signifying a positive impact, and "Ground," signifying the community of young people, especially underrepresented genders, that they strive to spotlight.
- In addition to technology, SplashGround raises awareness about social issues.



## **AMBASSADOR INTERN: FUTURE IMPACT CHALLENGE**

- This team is responsible for hosting all regular ACF events, such as the Future Impact Challenge, Game Impact Challenge, Minecraft hackathon, and ACF partner hackathons, among others.
- Brand ambassadors play a significant role in promoting ACF events within their community, and they also play a role in the management of those events.



## **PROJECT INTERN: INSPIROGRAM GLOBAL CHANGE MAKER**

- Inspirogram aims to bring online, project-based programming courses to a global community.
- Inspirogram aims to offer hands-on and engaging online programming courses and provides both video and written content to cater to students of all learning styles and meet the needs of every student.
- During 2022, Inspirogram supported high school students in Tanzania in learning programming.



# Community Empowerment

Technology is a driving force behind the transformation of the current world. Understanding and utilizing technology is crucial, as it is integrated into many aspects of our daily lives.

The Applied Computing Foundation believes in promoting equity in tech education and would like to support schools and teachers by providing training, curriculum support, scholarships for qualified students, hackathon sponsorships, and workshops for students. We currently work with King's County to bring quality tech learning programs to local students. If you like to connect us to other schools and school districts, please reach out to us at [contact@applied-computing.org](mailto:contact@applied-computing.org).

**Teacher Training**

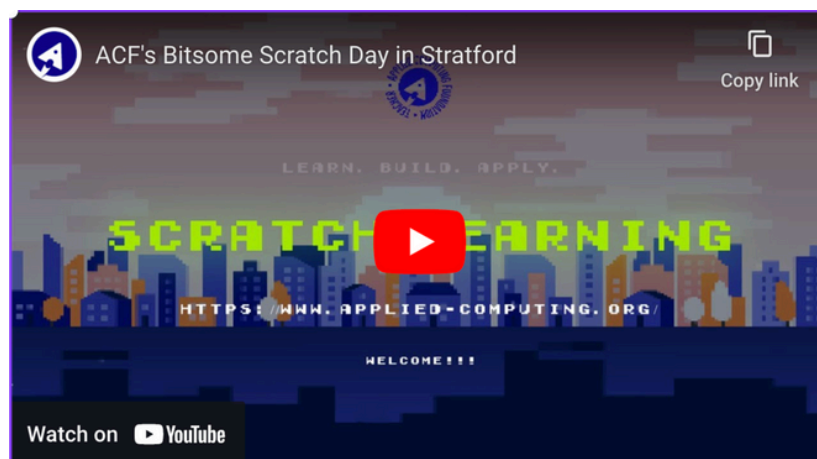
**Curriculum Support**

**Scholarship**

**Students' Workshop**

**Hackathon Sponsorship**

**Free Events**



# Community Empowerment Project: "Empower Central Valley"



[Donate](#)



Empower Central Valley team works with local schools to bring year-round tech learning programs to K-12 students in the Central Valley area.

We empower the Central Valley team to introduce coding and robotics fundamentals through Scratch, Scratch + WeDo, Microbit, and other fun-filled learning programs to their students.

We train local CS teachers to provide quality programs year-round, provide curriculum, support necessary tools, and host workshops.

If you would like to support us, please donate and sign up for our newsletter to be kept in the loop for more volunteering opportunities.

# Our ACF Coaches



[Join Us](#)

We believe that teaching is a demonstration of skills and knowledge. Learning is much more than acquiring domain knowledge. Our Coaches are proud to serve as near-peer mentors for students and understand that every student is unique. They support every student in reaching their full potential. At ACF, our Coaches are wizard makers!

The selection process for ACF Coaches is rigorous. During onboarding, they receive intensive training in both soft skills and technical skills, and consistent WASC-accredited training opportunities are offered to promote their professional growth. Our community coaches consist of college students, industry experts, and trained teachers who inspire one another and the next generation.





**Join Our Happy  
Mailing List**



**Contact Us For Further Inquiries!**

- 📍 Silicon Valley, CA
- 📞 Yoonjung Lera 480-200-9799 | Sawyer Kim 650-567-6487
- 🌐 [www.applied-computing.org](http://www.applied-computing.org)

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