



EVPC Hacks 2021

Hosted by Evergreen Valley High
School Programming Club

Introduction

- Welcome to EVPC Hacks 2021!
- 24 Hour Hackathon!
- Theme: War and Technology
- Hosted by the EVHS Programming Club!

Schedule & Website

- Our schedule can be viewed on our website!
- Scroll down to the schedule section
- evprogrammingclub.github.io/EVPCHacks/
- Our website has other cool information about organizers, sponsors, and volunteers!

Sponsors!

We're proud to have the following sponsors for EVPC Hacks 1:



Discord Walkthrough

Join At: <https://discord.gg/Vttxpav5Ba>

- If you need help, create a ticket and we'll respond to you ASAP
- Every team will have their designated voice channel which they can join
- Key reminders on workshops and important times will be posted in #announcements
- Feel free to talk to other hackathon attendees in #general



Discord Voice Channels

- Stay in your own voice channel
- Not required to stay 24/7
- Stay relatively appropriate because judges might come in
- The officers can see all channels, so please join only your own voice channel
- When you join, others will know as a loud noise is played upon entering the channel

Theme: Computer Science in War



The great progression in technology in the 20th century also meant a great progression in warfare.

- Geneva Conventions in Switzerland created International Humanitarian Law or IHL to govern war
- But IHL still does not cover more recent technological developments:
 - Artificial Intelligence
 - Remote Technology
 - Advanced Communications

Subthemes and Example Projects!

- Your Task: create a project that develops a nuanced perspective on Computer Science and technology in warfare
- Sub-themes and Examples include:
 - Awareness Projects
 - Websites, Slides, Campaigns
 - Facial Recognition
 - Can Artificial Intelligence tell a civilian from a combatant?
 - AR/VR
 - Training Software

WHAT IS INTERNATIONAL HUMANITARIAN LAW?
The international committee of Red Cross is extremely involved in Humanitarian Law and Relations. In 1863, the Geneva Conventions established 4 principles of humanitarian law.

DISTINCTION
it must be clearly distinguishable between civilians and combatants, as well as military and civilian objects

MILITARY NECESSITY
only use artillery for military reasons. Don't harm civilians without a purpose.

PROPORTIONALITY
if civilian damage is excessive in comparison to military goals accomplished, it should not be carried out.

PREVENTION OF UNNECESSARY SUFFERING
don't use weapons/ methods that cause unnecessary suffering (ex. Weapons that permanently damage soldiers' physical capabilities, like causing paralysis, etc. are banned)

International Humanitarian Law

Artificial Intelligence... IN WAR?

IN the Loop
Humans have direct control over machines

ON the Loop
Machines have control, but humans make all decisions affecting other humans

OUTSIDE the Loop
Machines have total control and can do anything without human support. They have complete autonomy.

Is being OUTSIDE the Loop a good idea?



Sponsored Challenge!

Sponsored Challenge: Build an application that will be judged by the echoAR team. You can create anything you want!

Link for echoAR's website: <https://www.echoar.xyz>

Video About EchoAR





Speakers and Judges

Workshop # 1 - EchoAR

- Learn About AR/VR during this cool workshop by echoAR
- Website can be found at <https://www.echoar.xyz>
- Will talk about their sponsored challenge, which you can earn if you use their technology
- EchoAR's CEO will be judging all projects made with their technology asynchronous to — results will be announced after the event!



Workshop # 2 - Google

- Hosted by Mr. Rajesh Parekh from Google
- Learn about how Google Maps works behind the scenes
- Data Analysis, Machine Learning, and Computer Vision will be discussed
- Exposure to the life of an engineer in Google
- **TODAY 7PM - 8pm**



Workshop # 3 - Cisco

- By Mr. Sunil Bommaji
- Learn about programming and what it takes to be a good programmer
- Opportunities and areas available in the computer industry for programmers
- A brief intro AI and ML as currently happening things.
- **TOMORROW 9AM -10 AM**



Workshop # 4 - Presentations

- Hosted by Ms. Galicia Gordon from Leading Learners
- Learn how to create an effective pitch
- Learn from an entrepreneur
- Will expose you to marketing techniques and presentational techniques you can use
- Ms. Gordon will also be one of our wonderful judges at this event!





Event Advisor, Mrs. Sangeeta Bhatnagar

- Computer Science teacher at Evergreen Valley High School
- Interacts with beginner, intermediate, and advanced level programmers on an everyday basis!
- Advisor of Evergreen Valley Programming Club and our Computer Science Honor Society Club
- We want to take this opportunity to say thank you to Mrs. Bhatnagar both for being our judge and for making this event possible!



Awards & Prizes

\$9000+

Everyone!

- Sashido Credits
- Wolfram Alpha (\$25)
- 1 Month echoAR Business Tier (\$89)
- Certificate of Participation
- Featured in 2021 Attendance List
- **Total: \$100+**



First Place Prizes!

- Wolfram One + Wolfram Alpha Plus (\$375)
- 1 Amazon Gift Card (\$25)
- Digital Ocean Credits (\$25 / person)
- Certificate of Excellence (Gold)
- **Total: \$1700 (Team of 4)**



Second Place Prizes!

- Wolfram One + Wolfram Alpha Plus (\$375)
- Digital Ocean Credits (\$25 / person)
- Certificate of Excellence (Silver)
- **Total: \$1600 (Team of 4)**

Third Place Prizes!

- Wolfram One + Wolfram Alpha Plus (\$375)
- Certificate of Excellence (Bronze)
- **Total: \$1500 (Team of 4)**



Most Innovative!

- Wolfram One + Wolfram Alpha Plus (\$375)
- Certificate of Excellence (Most Innovative)
- **Total: \$1500 (Team of 4)**



Best Pitch!

- Wolfram One + Wolfram Alpha Plus (\$375)
- Certificate of Excellence (Best Pitch)
- **Total: \$1500 (Team of 4)**



Sponsorship Winner!

- 1 Amazon Giftcard (\$50)
- 3 Months Business Tier echoAR (\$267)
- Certificate of Excellence (Sponsorship Challenge)
- **Total: \$1268 (Team of 4)**




Judging Criteria!

- **Fit:** Does the hack address the prompt?
- **Innovation:** Does the product introduce a new approach or perspective, technical, analytical, or visual?
- **Function:** Does it work? Usability, user experience, design of the hack
- **Potential:** Can the product be easily expanded in the future? Is it applicable in real life
- **Design:** Is the product aesthetically pleasing? Does the design of the product elevate its message?

Judging Rubric

- https://docs.google.com/document/d/1kEmQwvHcxIOLMQGRPHJ4iXkN_i-ooAfvBHCOMAdQ-g4
- Visit the link to view the judging rubric!


EVPC Hacks 2021 Judging Rubric
Revised/adapted from <https://digitalency.state.gov/wp-content/uploads/2019/09/Innovate-Hacking-Rubric.pdf>

Category	Lacking (0 PT)	Progress (1 PT)	Complete (2 PT)	Outstanding (3 PT)
Fit Does the product address the prompt?	The project has very little or no application.	The project takes wide liberty with the prompt and is only loosely related. The core messages are missing.	Project addresses the prompt but diverges in some core aspects. It is useful in theory but does not meet the "Outstanding Requirements."	The content of the project directly addresses the prompt. Project has application in a clear, unique way.
Innovation Does the product introduce a new approach or perspective, technical, analytical, or visual?	The chosen technology and design is already deeply established.	The project adds a new twist on established design. Provides a better way to attack the problem.	The new project tackles a problem that has been overlooked/ignored in the past, or attacks a problem with a new angle / on a bigger scale / on a higher level.	The technology or design breaks ground. The new project attacks a new problem and provides a solution.
Function Does the product function as intended?	Project is less than 20% functional.	Project is 20-40% functional.	Project is 40-80% functional.	Project is 80-100% functional.
Potential Can the product be easily expanded in the future?	The project shows no potential future plans or thought.	The project shows little recognition of next steps with the project, and project/slides are accessible.	The project addresses some future projects, and the project is accessible on GitHub or another shareable link (team shares this).	The project has great potential, the project is accessible on GitHub or an alternative website, and the project shows extensive thought for future steps.
Design Is the product aesthetically pleasing? Does the design of the product elevate its message?	No design. The project is uninviting and does not elevate the message.	Some intentionality is put into the project, but navigation is not intuitive. Message is somewhat muddled.	Project is well designed and easy to use. Message is clear.	Message is clear and fresh. Design is beautiful. Project is very well organized and requires no additional instructions to use.

Note: For awareness websites and slides, function and potential depend on how many people the team has reached, and whether or not they have plans that COULD allow them to reach more. Awareness projects can be scored for these categories relative to one another.



Questions?

Submissions!

Using **Devpost**

Register Now @ <https://evpc-hacks-2021.devpost.com>

You can submit anytime before March 6th at 5PM - hard deadline

Upload your code to Github, and make it a PUBLIC repository

Submit the link to the repository to Devpost

We'll be having live presentations, for which the schedule will be released soon



**Projects begin
NOW!**

First workshop in 1.5
Hours!

GO GO GO!



Volunteers!

A special thank you to all the volunteers that made this event possible!!

Advertising Team

Hansel Puthenparambil
Kshitij Teotia
Manav Gurnani
... and many more!

Sponsorship Team

Abhinav Penagalapati
Arleen Kaur
Ashok Devireddy
Duy Nguyen
Evan Nguyen
... and all EVPC members that
helped contact sponsors!

Speaker Team

Duy Nguyen
Varun Bommaji
... and many more!