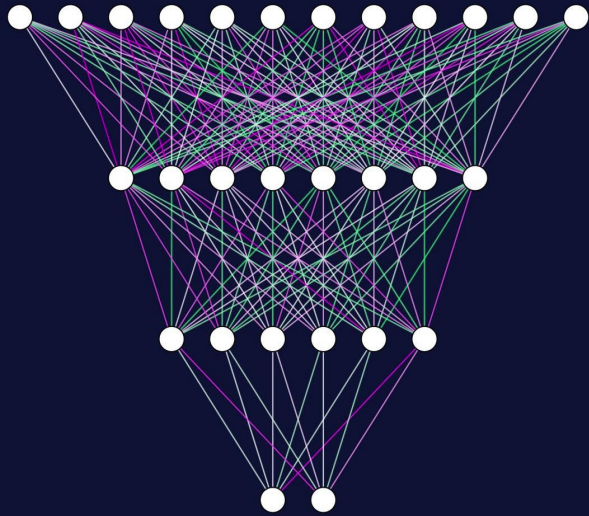


Supercomputing Challenge

Training Computers and Minds



2022-2023

Designed by Team 47, Los Alamos High School

WELCOME TO THE 33rd ANNUAL AWARDS CEREMONY



You Took The Challenge!
You Finished the Marathon!

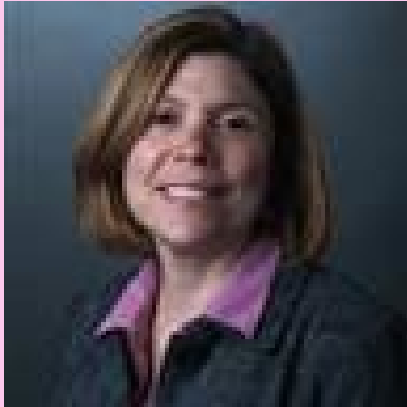


Message from our Executive Director David Kratzer



Right hand picture shows David (in the hat) with four generations
in the same pjs.

Los Alamos National Laboratory Welcomes You!



A word from
Angela Mielke
Executive Officer Deputy Director
for Science, Technology & Engineering

New Mexico Consortium



Thanks to Steve Buelow, CEO
NM Consortium, and his staff
for all their continued support!





Consult Welcomes You!!



Alphabetically by first name:

Celia, David, Karen, Patty



New Schools to the Challenge This Year



McKinley Middle School

Tucumcari High School

**Congratulations to the
2022-2023 Finalists Teams!**



The Finalists

Team 2

Team Members:

Sponsor:

Mentor:

Cottonwood Classical and Del Norte High School

For Crying "Drought" Loud

Ayvree Urrea, Kiara Onomoto, Violet Kelly

Karen Glennon

Flora Coleman

Team 4

Team Members:

Sponsor:

La Cueva High School

Machine Learning based Accessible Mobile App for Activity Recognition and Freezing of Gait Monitoring in Parkinson's Patients

Abitpal Gyawali, Aditya Koushik, Aiden Shoppel,
Amandeep Prasankumar, Venkata Menta

Jeremy Jensen



The Finalists

Team 6

Sandia High School

SINGS: A Simple Interactive N-body Gravitation Simulator

Team Member:

Tristan Eggenberger

Sponsor:

Bradley Knockel

Team 9

Capital High School

A Robotic Fire and Fire Weather Measuring System, Smokey

Team Members:

Zachariah Burch, Isel Aragon, Britny Marquez,

Daniel Leon

Sponsor:

Barbara Teterycz

Mentor:

David Ritter



The Finalists

Team 10

Academy For Tech & Classics

Predicting Heuristics Related to the Controversiality of a Social Media Post

Team Members:

Henry Tischler, Gene Huntley

Sponsor:

Jenifer Hooten

Team 13

La Cueva High School

Tracking Cislunar Orbits

Team Members:

Hadwyn Link, Ximena Serna, Kylen Reyner

Sponsor:

Jeremy Jensen

Mentor:

Mario Serna



The Finalists

Team 14

Los Alamos High School

Mapping Anthropogenic Ocean Litter with an Autonomous Underwater Vehicle

Team Member:

Daniel Kim

Sponsor:

Michela Ombelli

Team 27

Monte del Sol Charter School

Stress Anxiety Monitor (SAM)

Team Members:

Gabriella Armijo, Emlee Taylor-Bowlin

Sponsor:

Rhonda Crespo

Mentor:

Mark Galassi

The Finalists

Team 50

St. Thomas Aquinas School

Galaxies Far, Far Away

Team Member: Catherine Sedillo

Sponsor: Eric Vigil

Mentor: James Sedillo

Innovative Data Science Award

CNM In[?]enuity, Inc.

Innovative Data Science Award

Team 19 **Santa Fe Preparatory School**

Genetics of ADHD

Team Members: Camila Carreon, Greta Swanson, Luke Rand, Nandita Ganesan

Sponsor: Jocelyn Comstock

Mentors: Juergen Eckhert, Quinton Flores

CNM In⁹enuity, Inc.



Innovative Machine Learning Award



Innovative Machine Learning Award

Team 10

Academy For Tech & Classics

*Predicting Heuristics Related to the Controversiality of a
Social Media Post*

Team Members: Henry Tischler, Gene Huntley

Sponsor: Jenifer Hooten

Professional Presentation

Eric Chavez, Field Representative

Representing U.S. Senator Ben Ray Luján



Most Professional Presentation

Team 4

La Cueva High School

*Machine Learning based Accessible Mobile App
for Activity Recognition and Freezing of Gait
Monitoring in Parkinson's Patients*

Team Members:

Abitpal Gywali, Aditya Koushik, Aiden Shoppel,
Amandeep Prasankumar, Venkata Menta

Sponsor:

Jeremy Jensen

Award for StarLogo Agent-based Modeling



Eric Klopfer, MIT STEP Lab
Developers of StarLogo-Nova

Award for StarLogo Agent-based Modeling



Team 18

Media Arts Collaborative Charter School,
*Mental Health Apps And The Need For A
Crisis Button*

Team Members: Eduardo Dorado, Ana Sofia Rodriguez,
Wyatt Wade

Sponsor: Tanya Mueller

Get out your badge number for a random prize drawing for finishing this marathon!



And the winner is

Human Computer Interaction

Sponsored by

Stephen Guerin, SimTable



Human Computer Interaction

Team 27

Monte del Sol Charter School

Stress Anxiety Monitor (SAM)

Team Members:

Gabriella Armijo, Emlee Taylor-Bowlin

Sponsor:

Rhonda Crespo

Mentor:

Mark Galassi

Head Judges

Michael Trahan



Nick Bennett



Richard Barrett



Kaley Woelfel



Recognition of Expo Judges

Ed Angel

Phil Jones

Veena Parboteeah

Gennie Barrett

Nicholas Kutac

Abdaleziz Raad

Richard Barrett

Peter Lamborn

Lonnie Rednour

Nick Bennett

Max Lazo

Reffat Sharmeen

Jesse Crawford

Joan Lucas

Geoff Valdez

Mohit Dubey

Monique Morin

Peter Watson

Susan Gibbs

Joseph Olonia

James Wernicke

James Overfelt

Finalists Judges

Daniel Appel

Maureen Psaila-Dombrowski

Joan Appel

Tom Robey

Sharon Deland

Michael Trahan

Stephen Guerin

Kaley Woelfel

David Janecky



Shout Out

to

Alan Daugherty & Mary Sagartz

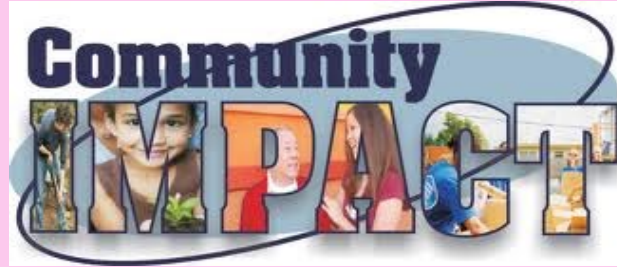
Code Break Team



Community Impact Award



Community Impact Award



Team 9

Capital High School

A Robotic Fire and Fire Weather Measuring System, Smokey

Team Members:

Zachariah Burch, Isel Aragon, Britny Marquez,
Daniel Leon

Sponsor:

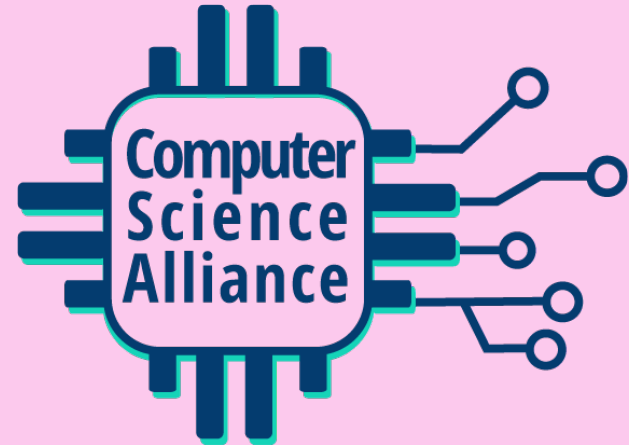
Barbara Teterycz

Mentor:

David Ritter



Middle School Award



Middle School Award



Team 50

St. Thomas Aquinas School

Galaxies Far, Far Away

Team Member:

Catherine Sedillo

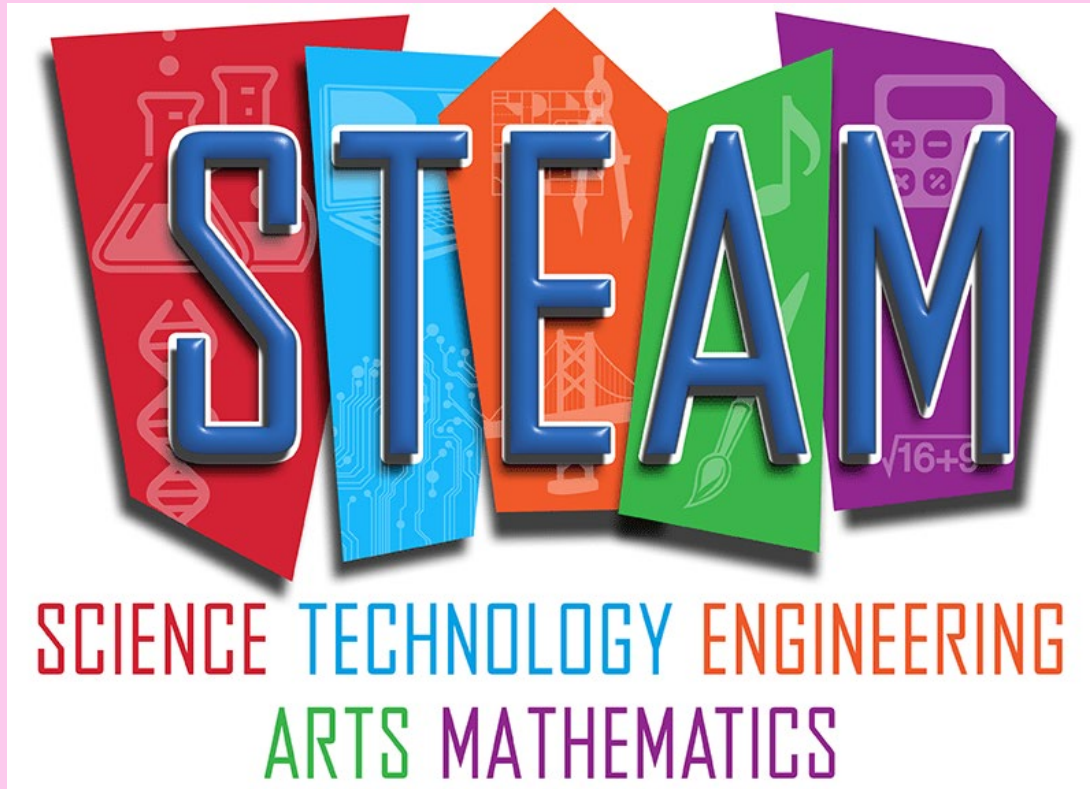
Sponsor:

Eric Vigil

Mentor:

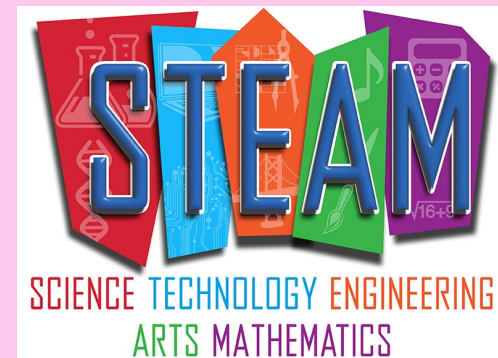
James Sedillo

STEAM Award





STEAM Award



Team 44

Team Member:

Sponsor:

La Cueva High School

Tech Generated Art

Victoria Outkin

Jeremy Jensen

Teacher Appreciation Award





Teacher Appreciation Awards

A good education can change anyone.

A good teacher can change everything.

Teacher Appreciation Award

Presented by: **Aileen Ukwuoma**

Alex Ukwuoma

Teacher Appreciation Award

Caia Brown

Justice Code/Harrison Middle School

Presented by: **Aileen Ukwuoma**

Alex Ukwuoma



Teacher Appreciation Award

Presented by: **Alexandrina Ukwuoma**

Teacher Appreciation Award

Rebecca Campbell

Justice Code/Harrison Middle School

Presented by: **Alexandrina Ukwuoma**



Teacher Appreciation Award

Presented by: **Emlee Taylor-Bowlin**



Teacher Appreciation Award

Rhonda Crespo

Monte Del Sol

Presented by: **Emlee Taylor-Bowlin**



Teacher Appreciation Award

Presented by **Sariah Mardo**

Teacher Appreciation Award

Thomas (Tommy) Evans

Tucumari High School

Presented by **Sariah Mardo**



Teacher Appreciation Award

Presented by: **Zachariah Burch**



Teacher Appreciation Award

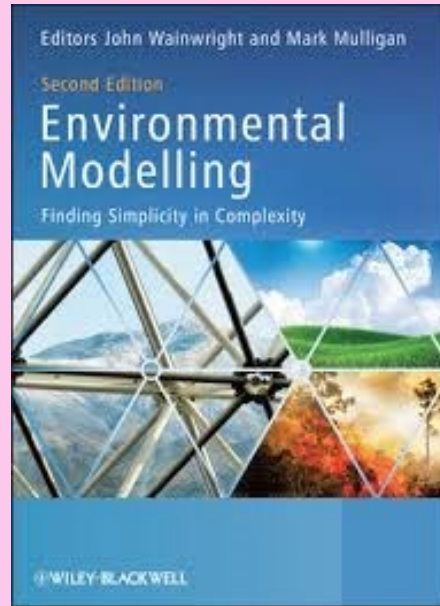
Barbara Teterycz

Capital High School

Presented by: **Zachariah Burch**



Environmental Modeling Award



Environmental Modeling Award

David Janecky, Sponsor, Challenge Advocate

Team 2

Cottonwood Classical and Del Norte High School

For Crying "Drought" Loud

Team Members:

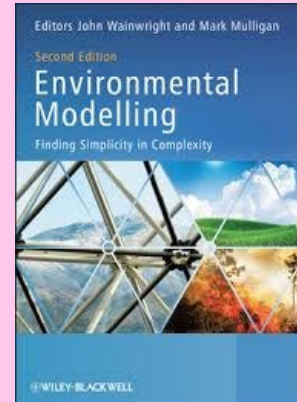
Ayvree Urrea, Kiara Onomoto, Violet Kelly

Sponsor:

Karen Glennon

Mentor:

Flora Coleman



NMTIE Teamwork Award

NMTIE

Furthering Education through Technology



NMTIE Teamwork Award

NMTIE

Furthering Education through Technology

Team 8

Capital High School

*Analyzing the Impact of COVID and its
Correlation with Vaccines*

Team Members:

Julia Almeida, Leslie Gutierrez,
Guadalupe Rojo, LaTrisha Padilla

Sponsor:

Irina Cislaru

Mentor:

Jon Brown



NMTIE Research Award

NMTIE

Furthering Education through Technology





NMTIE Research Award

NMTIE

Furthering Education through Technology

Team 13

Team Members:

Sponsor:

Mentor:

La Cueva High School

Tracking Cislunar Orbits

Hadwyn Link, Ximena Serna, Kylene Reyner

Jeremy Jensen

Mario Serna

Creativity & Innovation Award

Sponsored by



**Sandia
National
Laboratories**

Creativity & Innovation Award

Sponsored by Sandia National Laboratories



Team 37

Justice Code

Testing the Efficacy of our Superspray on the Oral Microbiome

Team Members:

Valerie Ozigbo, Gloria C. Enga

Sponsor:

Becky Campbell

Mentor:

Dr. Anthony Lupinetti



Numbers Please!



Logo for Next Year 2023 - 24

And the Logo is

-
-
-

Logo for Next Year 2023 - 24

CREATING A LOGO FOR NEXT YEAR IS WORTH
\$200 TO YOU!

WE'LL LOOK FOR SUBMISSIONS UNTIL JUNE 1, 2023

Send your submission to logo@supercomputingchallenge.org

Technical Poster Award



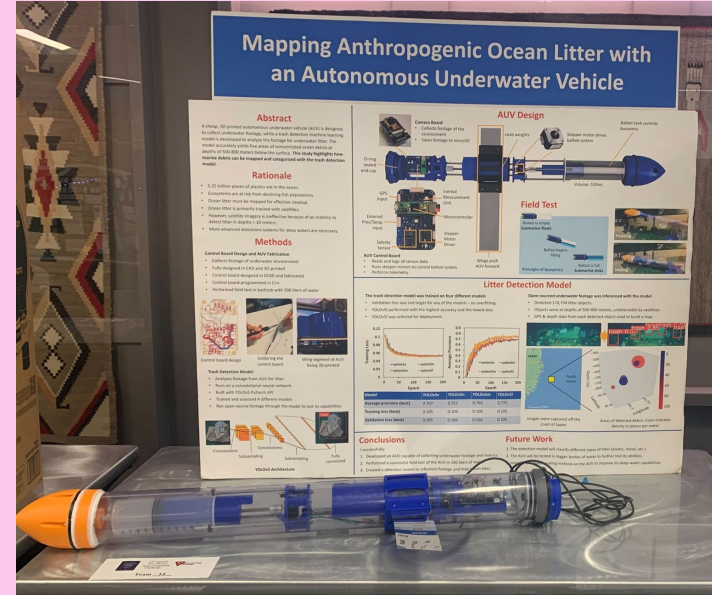
Technical Poster Award

Team 14

Los Alamos High School
Mapping Anthropogenic Ocean Litter with an Autonomous Underwater Vehicle

Team Member:
Sponsor:

Daniel Kim
Michela Ombelli



Crowd Favorite Award





Crowd Favorite Award

Team 41

Justice Code/International/Harrison

Tsunami Disaster Detection

Team Members: Kolton Walker, Delight Emma-Asonye, Leilani Baty

Sponsors: Caia Brown, Becky Campbell, Ryan Palmer

New Mexico Network for Women in Science and Engineering



New Mexico Network for Women in Science and Engineering

Team 39

Justice Code

AI Basketball

Team Members:

Frances Emma-Asonye, Praise Ejimkonye

Sponsor:

Becky Campbell

Mentor:

Patty Meyer

Presented by Cheri Burch





Magellan Award

An Explorer and a Risk Taker

Sponsored by Daniel and Mel Fuka, Challenge Advocates



Magellan Award

Team 15

Cleveland High School

Artificially made or not?

Team Member:

Layla Barela

Sponsor:

Ashli Knoell



Judges' Special Awards



Expo Judges' Special Award

Resource Efficiency

Team 29

Tucumcari High School

Wind Turbine Fencing

Team Members:

Sariah Mardo, Rachel Mardo

Sponsor:

Thomas Evans

Mentor:

Creighton Edington

Expo Judges' Special Award

Reach for the Sky

Team 28

Los Alamos High School

*Developing an Autonomous Aerial Package
Transport System*

Team Member:

Andres Iturregui

Sponsor:

Allan Didier

Mentor:

Clint Hubbard

Finalist Judges' Special Award

Coastal Guardian

Team 41

Justice Code/International/Harrison

Tsunami Disaster Detection

Team Members:

Kolton Walker, Delight Emma-Asonye,
Leilani Baty

Sponsors:

Caia Brown, Becky Campbell, Ryan Palmer

Finalist Judges' Special Award

Building Blocks of Adaptability

Team 22

Tucumcari High School,
*Using Sensors to Detect and Maintain
Distances in the Real World*

Team Members:

Aaron Chand, MiKayla Klinger

Sponsors:

Thomas Evans, Morisa Evans

Mentor:

Harry Henderson

Sponsor Recognition

Kudos for our sponsors!!

**The people in these businesses
and companies helped us
reach the Finish Line!!**

Primary Partners

- Los Alamos National Laboratory
- New Mexico Consortium
- Triad National Security, LLC

Platinum Partners

- Sandia National Laboratories

Gold Partners

- Westwind
- New Mexico Family and Community Engagement Solutions (New Mexico FaCES)

Silver Partners

- The Encantado Foundation
- Gulfstream Group and bigbyte.cc
- Los Alamos National Laboratory Foundation
- META
- PNM

Bronze Partners

- Air Force Research Lab, Kirtland
- ABQ-IT
- Descartes Labs
- Holmans
- HPE/Carahsoft
- Intel
- New Mexico Technology Council
- New Mexico Technology In Education (NMTIE)
- Simtable/Redfish Group

Educational Partners

- The Center for Connected Learning (CCL) and Computer-Based Modeling/NetLogo
- CNM Ingenuity, Inc
- Eastern New Mexico University
- MIT Starlogo-Nova
- New Mexico EPSCoR, Experimental Program to Stimulate Competitive Research
- New Mexico Highlands University

More Educational Partners

- New Mexico Institute of Mining and Technology
- New Mexico Public Education Department
- New Mexico State University
- Northern New Mexico College
- San Juan College
- Santa Fe Community College
- University of New Mexico
- UNM - Center for Advanced Research Computing

Friends of the Challenge

- Abba Technologies
- Cahill Family
- Computer Science Alliance, Paige Prescott
- Dr. Shaun Cooper, NMSU
- Daniel and Mel Fuka
- Clint Hubbard
- Maximo Lazo
- Irene Lee/Roger Critchlow
- Merrick

Friends of the Challenge (continued)

- NM Network for Women in Science and Engineering
- Risksense
- Peggy and Bob Robey
- Sealaska
- Stemboomerang
- Fred J Voss
- Windspirit Therapeutic Massage

You, too, can be a Challenge Sponsor!!



Support the Supercomputing Challenge when you shop!

Visit <http://www.smithsfoodanddrug.com/inspire>. Search for Supercomputing Challenge either by name or MY603 and then click Enroll.

New users need to create an account requiring some basic information, a valid email address and a *rewards* card.



Scholarship Recipients



Scholarship Committee

Hope Cahill, Creighton Edington,

and **Dana Roberson**



Scholarship Recipients

<u>Name</u>	<u>High School</u>	<u>University</u>
Isel Arragon	Capital High School	Santa Fe CC
Zachariah Burch	Capital High School	University of Portland
Gloria Engle	Justice Code	Undecided
Violet Kelly	Cottonwood Classical Prep	Oregon State University
Daniel Leon	Capital High School	Neumont College CS/Utah
Kiara Onemoto	Del Norte High School	University of Rochester/NY
Isaac Rankin	Justice Code	Undecided
Ayvree Urrea	Cottonwood Classical Prep	Oral Roberts University



Scholarship Donors



Challenge Alumni



**And the moment we
have ALL been
waiting for**

**Another
Drum roll,
please!**

But First Another...



Supercomputing Challenge
Training Computers and Minds

2022-2023

Designed by Team 47, Los Alamos High School

For real this time

Our Third Place Winner is.....

Another

Drum roll,

please!

Third Place

Team 6

Sandia High School
*SINGS: A Simple Interactive
N-body Gravitation
Simulator*

Team Member:

Tristan Eggenberger

Sponsor:

Bradley Knockel



CONGRATULATIONS!



Our Second Place Winner is.....

Drum roll....

Second Place

Team 14

Los Alamos High School
*Mapping Anthropogenic
Ocean Litter with an
Autonomous Underwater
Vehicle*

Team Member:

Daniel Kim

Sponsor:

Michela Ombelli



GOOD WORK!!

**The moment we've all been waiting
for!**

Our First Place Winner is.....

First Place

Team 4

La Cueva High School

Machine Learning based Accessible Mobile App for Activity Recognition and Freezing of Gait Monitoring in Parkinson's Patients

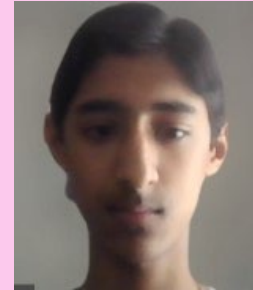
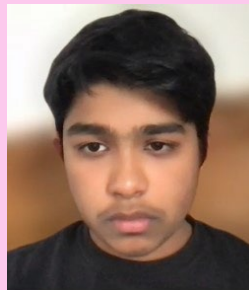
Team Members:

Abitpal Gyawali, Aditya Koushik, Aiden Shoppel, Amandeep Prasankumar, Venkata Menta

Sponsor:

Jeremy Jensen

**WONDERFUL
ACHIEVEMENT!**



First Place Winners

Brief overview of their project...

Go for it!

We'll see you next year!!!
It will be our 34th year!



Congratulations Seniors!

We look forward to your coming back to be an alumni supporter!