

# C-STEM is a UC approved Educational Preparation Program for Undergraduate Admission to all UC Campuses

# **Message From the Director**

Dear C-STEM Teachers and Students,

Welcome to the 2018 RoboPlay Challenge Competition!

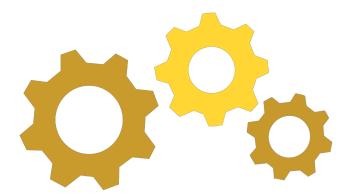
This year the C-STEM team has organized an extraordinary day for our C-STEM students. Our goal is for all our C-STEM students to have fun showing off their teamwork, critical thinking, and problem solving skills. Today will be full of excitement as students overcome the manufacturing and automation challenges we have laid out.

We are very proud to be a UC Approved Educational Preparation Program for undergraduate admission to all UC campuses. We are particularly proud of our C-STEM Math-ICT Curriculum which provides students with up to 12 years of computer science education through hands-on integrated learning of math and computer science.

As the program grows and expands, so does our wealth of curriculum and educational technologies. We recently released C-STEM Studio version 4.6 which overhauls the user experience. It is easier than ever to navigate C-STEM Studio and to use its collection of tools to seamlessly connect and control Linkbots, Lego Mindstorms, Arduino, and Raspberry Pi. As always, C-STEM Studio continues to be a freely available resource for all students and teachers. RoboBlockly has also received recent updates including a new Classroom Management System for C-STEM schools where teachers can directly assign activities to students and keep track of their scores and progress all from within RoboBlockly.

We would like to extend a warm welcome to our new participants this year and welcome back those who are returning. We have an extraordinary group of students with us and, for the first time, are operating at maximum capacity of the UC Davis Pavilion. Today we have nearly 40% more teams than we did last year with 119 teams at UC Davis and 33 teams in Irvine.

Excitement is also growing as we get closer to our Girls in Robotics Leadership (GIRL) and GIRL+ camps this summer where we will have more participants than ever before with 12 camps.



We are proud of all of you. Good luck in the competition!

Dr. Harry H. Cheng C-STEM Center Director and Professor

# Organized by





# RoboPlay Challenge Competition Schedule - May 19, 2018

TIME	EVENT
7:30 - 8:30 AM	Registration and Setup for RoboPlay Challenge Competition
8:30 - 8:40 AM	Welcome and Introduction
8:40 - 9:00 AM	RoboPlay Challenge Competition Introduction
9:00 - 12:00 PM	RoboPlay Challenge Competition Problem Solving
12:00 - 12:45 PM	Lunch Break
12:45 - 3:45 PM	RoboPlay Challenge Competition
3:45 - 4:00 PM	Break Time
4:00 - 5:00 PM	Awards Ceremony:
	C-STEM Awards of Achievement
	GIRL's Leadership Award
	C-STEM Awards of Excellence
	C-STEM Scholarship
	<ul> <li>RoboPlay Video Competition Winners</li> </ul>
	RoboPlay Challenge Competition Winners

## **Contact Information**

C-STEM Center Director: Education Service Manager: C-STEM Regional Coordinator

Orange County Site:

Harry Cheng Daniel Ryan Merry Kim

Email: hhcheng@ucdavis.edu Email: djryan@ucdavis.edu Email: mkim209@ivc.edu Phone: (530) 752-5020 Phone: (530) 752-8788 Phone: (949) 367-8309

Share photographs taken during the RoboPlay Competition with Lead Photographer Nicholas Chan at ngchan@ucdavis.edu for a chance to be featured on the C-STEM Center website and social media!

## **COMMITTEES**

## **RoboPlay Competition Volunteer Leadership**

RoboPlay Chief Judge: Rex Schrader RoboPlay Coordinator: Emma Kristovich

## Davis, CA

Regional Chair: Daniel Ryan Regional Chair: Merry Kim

Regional Coordinator: Emma Kristovich Regional Coordinators: Parisa Bendavoud

Irvine, CA

Head Judge: Rex Schrader Annie Gao

Division Lead Judges: Roger Nattkemper Sherin Stephen

Dan Hull Head Judge: Ansel Teng

Dean Bunn Division Lead Judges: Bruce Feinstein

Ajith Gopinathan

## **Challenge Task Development Team**

Emma Kristovich Chandni Nagda Josh Tu Mae Underwood Steven Herman Rachel Talbot Jerry Kuo Tim Hulse



## **COMPETITION INFORMATION**

## **General Competition Information**

- The competition lasts six hours, split into two portions.
  - Unscored: The first three hours are for students to build and program their robots to complete the challenges presented during the competition.
  - Scored: The last three hours are for teams to compete against each other.

#### **Unscored Competition Information**

- Each team has a designated practice area (pit) to place their 2018 RoboPlay practice mat.
- Each team has two 17-minute practice periods on the official 2018 RoboPlay Competition Board between 10am and noon.

#### **Scored Competition Information**

- Each team has three 17-minute competition periods on the official RoboPlay Competition Board between 12:45pm and 3:45pm. Each 17-minute period begins and ends as specified in the schedule. Please be prompt.
- There is a three-minute passing period in between each team's run.

#### **Reminders for Students:**

- Read the scoring criteria to decide the best strategy for earning points.
- There are 10+ challenges to complete in any order. Successful completion of each challenge earns team points. The goal is to get as many points as possible. Try for partial points if a team cannot complete the entire challenge.
- Ask clarifying questions.

### **Challenge Competition Awards:**

- Awards are given to the first, second, and third place winners for each respective division at each
  of the RoboPlay Challenge Competition locations.
  - Regional awards are not issued in divisions with fewer than four competing teams.
- Statewide awards are awarded to the first, second, and third place winners for each of the divisions.
- In the case of a tie score, the following will be used as tie breakers:
  - Team with the lowest total number of scoring runs, including aborts
  - Team with the fewest aborts if score runs are identical
- Additional Judge's Awards are decided by the judges for each division at each competition location.
  - 1. Perseverance Award goes to the team that improvises and overcomes a difficult situation while still maintaining a high level of performance
  - 2. Spirit Award celebrates a team that displays extraordinary enthusiasm and spirit
  - 3. Teamwork Award recognizes a team that fluidly works together with strong communication, tasks delegation, and excellent time management

#### **COMPETITION RULES**

#### **General Rules**

- Teams may not use custom-made parts.
- Use of electronics during the competition other than Linkbots and the designated laptops (including personal computers, calculators, cell phones, tablets, or any other computing device) is prohibited.
- There is no internet access during the competition. Teams using the internet during the competition will be disqualified.
- Teams may not collaborate with other teams.

#### **Practice Pit Rules**

- Each team may bring extra Linkbots as backups, but no more than five Linkbots may be out at one time in the practice pits.
- Teams may use as many laptops as they have students in the pits.

#### **Competition Area Rules**

- Teams may not bring more than one laptop into the competition area.
- Teams may not use more than four I-bots and one L-bots simultaneously, nor have more than five active Linkbots at a time (an additional may be used as a dongle).
- Challenges may not be "chained together." Teams cannot complete two challenges simultaneously with the same program.
- Teams are responsible for setting up the competition board for each run of each challenge, as specified in the challenge text.
- Challenges are immediately stopped when the 17-minute period ends. Points will be calculated when time is called.
- No Bots may be placed on the Competition Board during the three-minute passing period between competition times.

#### **Random Numbers:**

- Input random numbers into the program at the beginning of each run.
- Use the scanf() function to pass random numbers into the program.
- Random numbers change at the start of every run. Refer to the Table Judge, who will display and announce the relevant numbers for each run.
- Enter your random numbers only after pressing "Run". Step away from the computer after inputting the numbers.
- Do not strategically abort your challenge to get better random numbers. Judges may ban teams
  that abort challenges from participating in the remainder of the competition period.

#### **Software/Programming:**

- Software: C-STEM Studio v4.0 or higher, Ch 8.0, Linkbot Labs 1.1.1
- Programs for controlling the robots are written in Ch and run in ChIDE from SoftIntegration, Inc.

SCHOOL	TEACHER	team Name	BOARD & PIT	PRACTICE	COMP TIMES
Aerospace STEM Academy	Kristina O'Brien	Fire Breathing Rubber Duckies	D1-Z/97	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Aerospace STEM Academy	Kristina O'Brien	Teddy Bears	D1-Y/98	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Albert Einstein Middle	Kimberly Stowell	Eagles A	D1-N/83	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Albert Einstein Middle	Kimberly Stowell	Eagles B	D1-N/84	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
American Canyon Elementary Schools	Damon Wright	AVERA	D1-V/87	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
American Canyon Middle	Ana Castro	(SyntaxError);	D1-M/85	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
American Canyon Middle	Ana Castro	BRAIN.EXE STOPPED WORKING	D1-M/86	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
American Canyon Middle	Tammy Lee	JACK IN THE BOTS	D1-U/90	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
American Canyon Middle	Tammy Lee	PROGRAMMING PEGASI	D1-V/88	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
American Canyon Middle	Jonathan Mao	ROUND TABLE - THE LAST HONEST BOTS	D1-R/93	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
American Canyon Middle	Jonathan Mao	THE LITTLE EINSTEINS	D1-R/94	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
American Canyon Middle	Sabrina Lui	VECTOR	D1-U/89	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Annie Pennycook Elementary	Jennifer Engstorm	Black Lightning	D1-C/54	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Annie Pennycook Elementary	Jennifer Engstorm	RoboLords	D1-D/53	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Annie Pennycook Elementary	Sue Bohannon	The Snowshadows	D1-D/51	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Annie Pennycook Elementary	Cynthia Cirino	The Trolly Trolls	D1-H/49	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Annie Pennycook Elementary	Sue Bohannon	Annie Pennycook Elementary	D1-D/52	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22

	I OK KOD				131014 1
SCHOOL	TEACHER	TEAM NAME	Board & Pit	PRACTICE	COMP TIMES
Bridgeway Island Elementary	Alison van der Heide	BWI 3	D1-A/69	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Bridgeway Island Elementary	Alison van der Heide	BWI 4	D1-A/70	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Bridgeway Island Elementary	Megan Schoellhamer	Schoellhamer 1	D1-E/6	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Bridgeway Island Elementary	Megan Schoellhamer	Schoellhamer 2	D1-W/5	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
California Middle	Maria Aguilar	Jixsterz	D1-Q/81	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
California Middle	Maria Aguilar	Robotic Bears	D1-N/82	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
California Middle	Greg Bostock	Taem Charlie Alpha Lima	D1-Q/79	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
California Middle	Greg Bostock	The Honors in Cool Coding	D1-Q/80	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Cambridge Elementary	Heather Van Zile	Cambridge Coders	D1-I/76	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Cambridge Elementary	Sandra Soto	Cambridge Engineers	D1-M/71	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Cambridge Elementary	Sandra Soto	Cambridge Techies	D1-J/72	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Cambridge Elementary	Heather Van Zile	Engineering Cougars	D1-J/74	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Camptonville Academy	Cathy Vue	Tech Ninjaz	D1-Y/99	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Camptonville Academy	Chris Mahurin	Camptonville Academy 1	D1-Z/95	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Camptonville Academy	Chris Mahurin	Camptonville Academy 2	D1-Z/96	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Cave Language Academy	Cory Lynch Grant	Grey Wolves	D1-B/65	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Cave Language Academy	Cory Lynch Grant	Marvelous Mermaids	D1-B/66	10:20 - 10:3 <i>7</i> 11:20 - 11:3 <i>7</i>	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22

SCHOOL	TEACHER	TEAM NAME	BOARD & PIT	PRACTICE	COMP TIMES
Cave Language Academy	Lorena Hernandez	Those Guys on a Team	D1-E/61	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Ernest Kimme Charter Academy for	Roxann Lynch- Burns	The Mighty Markham Timber-Bots	D1-E/78	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Esparto Middle School	Spencer Krautkraemer	Manufactured Happiness	D1-T/35	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Esparto Middle School	Spencer Krautkraemer	RoboSapiens	D1-T/36	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Federal Terrace Elementary School	Angelina Gonzales	Dem Cool Kids!	D1-G/57	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Federal Terrace Elementary School	Angelina Gonzales	Gear Girls	D1-G/58	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Foothill Middle	Margaret Elliot	Did We Win Yet?	D1-S/32	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Foothill Middle	Margaret Elliot	My Password is Password	D1-T/34	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Foothill Middle	Ellen Elliot	We're All Hanzomains	D1-P/41	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Franklin Middle	Divia Mixon	Rose Gold	D1-F/63	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Franklin Middle	Divia Mixon	The Destroyerz	D1-F/64	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Glen Cove Elementary	Whitney Yragui	The Alien Panthers	D1-H/60	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Glen Cove Elementary	Whitney Yragui	The Pencil Group	D1-G/59	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Golden West Middle	Jennifer Pirondini	Crafloof	D1-AA/9	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Golden West Middle	Jennifer Pirondini	No Fish Left	D1-AA/10	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Green Valley Middle	Tom Vohs	Alphabot	D1-Y/100	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Green Valley Middle	Tom Vohs	Robogang	D1-V/102	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02

SCHOOL	TEACHER	TEAM NAME	Board & Pit	PRACTICE	COMP TIMES
Highland Elementary	Christopher Victa	Phantom Thieves with Unicorn Squad	D1-A/68	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Highland Elementary	Christopher Victa	Team Tech	D1-B/67	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Highland Elementary	Gina Madrigal	Unicorn Squad	D1-K/43	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Hogan Middle	Eric Andal	Hogan Mechanical Institute	D1-X/2	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Hogan Middle	Rosalind Hines	Hogan Mega Spartans	D1-L/48	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Hogan Middle	Greg Murray	Hogan Robotics Club	D1-W/3	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Hogan Middle	Greg Murray	RoboSpartans Guild	D1-W/4	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Hogan Middle	Rosalind Hines	Spartan Future Foundation	D1-H/50	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Hogan Middle	Gina Davis	Spartan Mechanics	D1-L/47	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Hogan Middle	Eric Andal	Spartan Robotics Corportation	D1-X/1	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Hogan Middle	Gina Davis	Spartan Squadron	D1-K/45	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Joseph H. Wardlaw Elementary	Michael Ramot	Masters of The Robo-verse!	D1-L/46	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Joseph H. Wardlaw Elementary	Michael Ramot	Robotics Incorporated	D1-K/44	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Lincoln Elementary	Beverly Lynn	The Magnets	D1-F/62	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Manteca High	Neil Macdannald	Manteca High	D1-P/40	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Mare Island Health and Fitness Academy	Diana Matlock	The Technos I	D1-C/55	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Mare Island Health and Fitness Academy	Diana Matlock	The Technos II	D1-C/56	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02

SCHOOL	TEACHER	TEAM NAME	BOARD & PIT	PRACTICE	COMP TIMES
Mountain Vista Middle	Nicki Thomas	MVMS 1	D1-O/37	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Mountain Vista Middle	Nicki Thomas	MVMS 2	D1-O/38	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Pine Grove Elementary STEM	Timothy Keys	Pine Grove Robocops	D1-I/77	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Pleasant Hill Middle	Christopher Tod	RoboRams	D1-O/39	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Redwood Middle	Kristy Lindsey	Team 1	D1-R/92	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Redwood Middle	Kristy Lindsey	Team 2	D1-U/91	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Roosevelt Middle	Zelda Allison	R.M.S.R.C.	D1-P/42	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
St. Catherine of Siena	Anne Healy	Starbots	D1-J/73	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Travis Elementary	Shawna O'Hara	#include	D1-AA/8	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Travis Elementary	Melissa Philips	BroCoders	D1-I/75	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Travis Elementary	Shawna O'Hara	Color Coders	D1-X/7	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Valley View Middle	Shauna Hawes	Jag Kids are Jag-riffic!	D1-S/28	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Valley View Middle	Shauna Hawes	JagEights are Great!	D1-S/30	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22

SCHOOL	TEACHER	TEAM NAME	BOARD & PIT	PRACTICE	COMP TIMES
American Canyon High	Alma Gonzales	Last Second	D2-D/113	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
American Canyon High	Alma Gonzales	Cool Coders	D2-D/114	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
American Canyon High	Nhu-Y Vu	Best Bots	D2-C/111	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
American Canyon High	Nhu-Y Vu	Luvbots	D2-D/112	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
American Canyon High	Scott Marsden	W.I.G.G.L.E.S.	D2-E/117	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
American Canyon High	Stefani Williams	pandas. no explanation	D2-F/118	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Angelo Rodriguez High	Katie Miller	Skillz?404	D2-E/116	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Camptonville Academy	Cathy Vue	Infinite Loop	D2-A/104	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Fred C. Beyer High	Heidi Pagani	Bell	D2-A/103	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Fred C. Beyer High	Liliana Lazo	Dry Goods	D2-A/105	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Fred C. Beyer High	Liliana Lazo	Power Surge	D2-B/106	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Luther Burbank High	Naomi Bahr	Robotic Titans	D2-B/108	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Manteca High	Clay Dagler	Snap Connectors	D2-B/107	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Manteca High	Doug Obrigawitch	The Good, The Bot, The Ugly	D2-C/110	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Manteca High	Neil Macdannald	Name Under Maintenance	D2-F/119	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Valley Oak High	Julie Lovie	Valley Oak High School	D2-C/109	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Vintage High	Paul Brochard	CrusherBots 1	D2-E/115	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42

SCHOOL	TEACHER	team Name	BOARD & PIT	PRACTICE	COMP TIMES
American Canyon High	Devin Reza	The Leftovers	D3-E/23	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
American Canyon High	Ronald Eick	One For All	D3-D/19	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
American Canyon High	Ronald Eick	Not AC	D3-D/20	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
American Canyon High	Scott Marsden	Project J.A.D.E.	D3-E/22	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
American Canyon High	Stefani Williams	GIRLS CAN TOO!	D3-D/21	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Angelo Rodriguez High	Katie Miller	Fruitless Efforts	D3-C/18	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Angelo Rodriguez High	Lisa Turgeon- Staggs	ECHS	D3-C/17	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Angelo Rodriguez High	Sarah Melanephy	Apple Fritter	D3-B/15	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Angelo Rodriguez High	Sarah Melanephy	Foot Lettuce	D3-C/16	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
College Park High	Dylan Bland	FalconX	D3-F/27	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Livermore High	Susan Johnston	Alex and the RoboKids	D3-G/29	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Luther Burbank High	Naomi Bahr	Overclockers	D3-F/25	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Manteca High	Clay Dagler	LinkbotCH	D3-B/13	10:00 - 10:17 11:00 - 11:17	12:45 - 1:02 2:25 - 2:42 3:25 - 3:42
Manteca High	Doug Obrigawitch	Unknown Error	D3-G/33	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
Mt. Eden High	Michael Pelland	ERROR_ACCESS_ DENIED	D3-B/14	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Piner High	Zachary Alexander	Our Programs Work 60% of the Time, All the Time	D3-A/120	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Piner High	Zachary Alexander	It Worked in RoboSim	D3-G/31	10:20 - 10:3 <i>7</i> 11:20 - 11:3 <i>7</i>	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22

SCHOOL	TEACHER	TEAM NAME	BOARD & PIT	PRACTICE	COMP TIMES
River City High	Dubarrie Fagout	KIL-A-BYTES	D3-E/24	10:40 - 10:57 11:40 - 11:57	1:25 - 1:42 2:05 - 2:22 2:45 - 3:02
River City High	Judy Tan	River City Raiders	D3-F/26	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
St. Patrick - St. Vincent Catholic High	Steve Iribarne	SPSV Certified	D3-A/11	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22
Vintage High	Paul Brochard	CrusherBots 2	D3-A/12	10:20 - 10:37 11:20 - 11:37	1:05 - 1:22 1:45 - 2:02 3:05 - 3:22

#### **BE A PART OF C-STEM**

The UC Davis Center for Integrated Computing and STEM Education (C-STEM) aims to transform computing, science, technology, engineering, and mathematics (C-STEM) education through integrated learning, guided by two key objectives: To close the mathematics achievement gap that exists in K-12 education, and to develop students' 21st century problem solving skills in order to tackle real world concerns.

The C-STEM program has been implemented across various regions in California, and will soon be implemented in new areas across the United States. The program only works when everyone is involved to help students succeed: parents, teachers, school administration, and community.

We are looking forward to seeing you become part of C-STEM in any of the following ways:

## **Volunteer your time:**

C-STEM events such as the RoboPlay Challenge Competition wouldn't be possible without volunteers. No experience required! In addition, if you are a C-STEM teacher, there are numerous ways you can help the C-STEM program, at your local district, at conferences, or at other events.

#### Make a donation:

The C-STEM Center is currently looking for individual, corporate, and foundation sponsors to help fund C-STEM scholarships, events, and programs. We can work with you to design a sponsorship package that meets your needs and helps provide C-STEM programming and educational opportunities to more students across the nation.

#### Talk to others about C-STEM:

Help bring C-STEM programming to your local school and district! If you liked what you saw at the RoboPlay Challenge Competition and would like to see it in your child's local school and district, contact Dr. Harry Cheng, C-STEM Center Director and Professor, (530) 752-5020, hhcheng@ucdavis.edu. It also helps to talk to your teachers and principals at your schools and help us connect with them!

## **Pavilion - Upper Level**

