

CSTA
2020 Annual Conference


Vicky Sedgwick
K-6 Computer Science Teacher
Los Angeles, CA
@visionsbyvicky

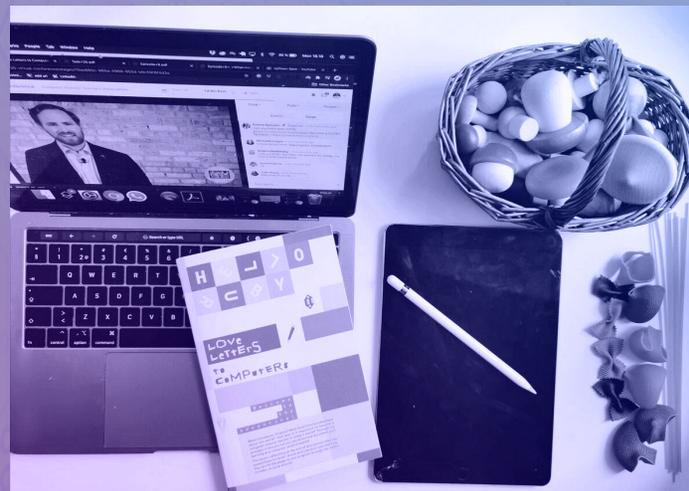
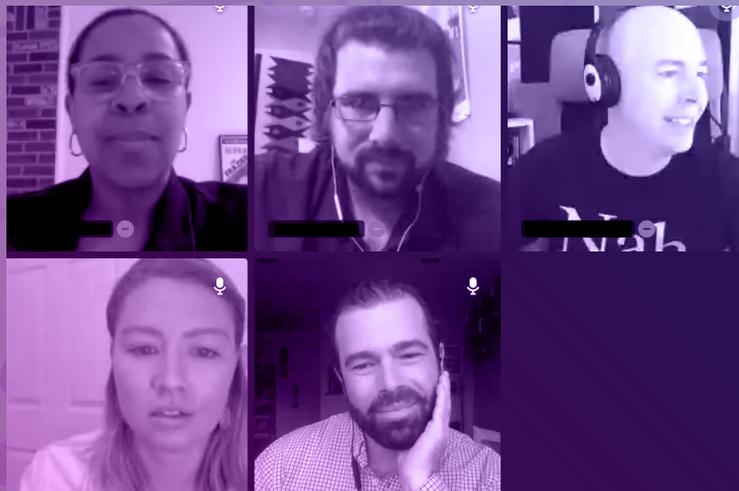
CSTA BOARD MEMBER

HOP IN TO CSTA 2020

ELEMENTARY CS TEACHER CONFERENCE COMMITTEE

#CSK8

Annual Report 2019-2020



Letter From Our Executive Director

To Our CSTA Community,

As I often say, teaching is hard, and teaching computer science is even harder. Well, then I guess teaching computer science in 2020 is harderer.

In all seriousness, the last six months brought challenges I never could have imagined, and as always, teachers responded with passion, creative problem solving, and dedication to their students. It's truly inspiring to see the many ways teachers have risen to the moment, and at CSTA we're proud of how we've adjusted to continue supporting and empowering CS teachers. Starting with pivoting our annual conference to an all-virtual event that nearly tripled attendance while increasing attendee satisfaction, we've been exploring new ways to meet our community where they need it most. Our chapters and members have been at the forefront of this work, with chapters holding over 117 virtual PD events since the start of the pandemic and our Equity Fellows ensuring that addressing racism in CS education remains core to the work of the organization.

This year highlighted the oft-overlooked expectations that teachers face to be counselors, mentors, IT troubleshooters, advocates for their students, the consistent friendly face their students can count on, as well as continuing to be subject matter experts and provide skilled instruction even in the face of unprecedented challenges. **Not surprisingly, teachers rose to the expectations.** It's clear that as we all navigate the year ahead we need to recognize and value the expertise that teachers bring to the work they do. Here at CSTA, we're committed to creating space for teachers to learn with their peers and support their career-long growth, beyond a single hour, day, or week of professional development. CSTA will continue to be the voice of computer science teachers.

Thank you to our partners that make this work possible, especially our Premier Partner Microsoft, and our Strategic Partners Google and ACM. Most importantly, thank you to our incredible members for all you do to support students. Your work is essential, and we're so proud of the impact you have on the world.



Jake Baskin,
CSTA Executive Director

Investing in CSTA Chapter Growth, Success and Leadership

CSTA's Chapters are the heartbeat of the organization – and that heartbeat has never been stronger. Thanks to the support of CSTA+ membership and our partners, we've seen our chapters continue to make strides forward, despite the challenges associated with COVID-19.

These chapters, under the leadership of 400 chapter leaders who dedicated their time and talents to support their local CS community, remained active during this time by:

- ▶ Holding 389 chapter meetings and PD events before COVID
- ▶ Holding 117 virtual meetings and PD events in response to COVID
- ▶ Ensuring over 2,800 members received PD, serving an estimated 70,000+ students

With the onset of COVID-19, we advised chapters to stop holding in-person events. Many of our chapters taking advantage of the chapter grant program were also forced to put their events on hold; however, three chapters were able to get their events in, under the wire. We awarded CSTA South Carolina a major PD grant for its statewide virtual summer CS PD Week. In total CSTA awarded \$62,466 in grants to chapters over the program year.

"I am elated that I am a part of an amazing team of like-minded professionals. And a big thank you for your encouragement and support as always."

JULY 2020 CHAPTER STATUS

Total Chapters: **92**
Total Volunteer Chapter Leaders: **450**
New Websites Launched: **22**
Events Held: **506**
Total PD Weeks: **42**
Grants Awarded: **\$62,466**

2020 CHAPTER LEADERSHIP SUMMIT AT A GLANCE

Chapter Leaders in Attendance: **304**
Completed Chapter Goals: **78%**
Left With Implementable Ideas: **100%**

JULY 2019 CHAPTER STATUS

Total Chapters: **78**
New Websites Launched: **21**
Events Held: **275**
Grants Awarded: **\$61,202**

2019 CHAPTER LEADERSHIP SUMMIT AT A GLANCE

Chapter Leaders in Attendance: **63**
Completed Chapter Goals: **71%**
Left With Implementable Ideas: **100%**

CSTA's Annual Conference Continues Massive Growth

2018

Attendees: **746**
 Scholarships: **117**
 Exhibitors and sponsors: **60**
 Satisfaction: **89%**

THE PROGRAM

4 General Sessions
22 Workshops
6 Birds of a Feathers
53 Sessions

2019

Attendees: **1,014**
 Scholarships: **233**
 Exhibitors and sponsors: **65**
 Satisfaction: **93%**

THE PROGRAM

4 General Sessions
20 Workshops
7 Birds of a Feathers
51 Sessions

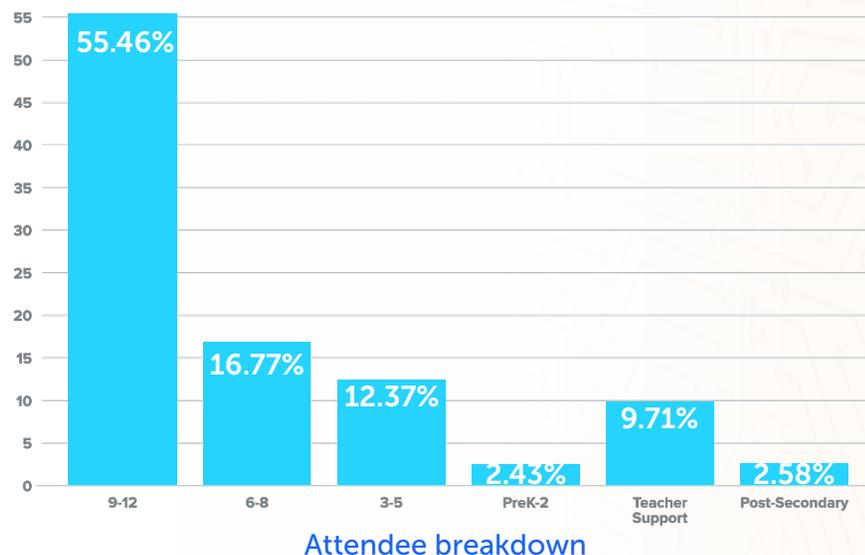
2020

Total Registered Attendees: **2,908**
 Scholarships: **844**
 Exhibitors and sponsors: **47**
 Satisfaction: **98.5%**

THE PROGRAM

4 General Sessions
28 Workshops
11 Birds of a Feathers
94 Sessions
20 Posters
210 Presenters

July 2020 Attendee Breakdown by Professional Role



“Attending the CSTA virtual conference as a first-year attendee was amazing and invigorating. Not only does it help to know we are all in this crazy situation together, but it helps to know we have so many resources and people willing to help us.”

— CSTA 2020 Attendee

Nurturing a Growing Community

In July 2018, CSTA+ membership launched with 400 new members joining on day one. As of July 2020, the community has grown to 3,561 members. Thanks to the support of our partners, including Pluralsight One, ACM, and We Teach_CS, CSTA+ members receive benefits they can't find anywhere else.

New this year, we've added a library of CSTA event content exclusively available to CSTA+ members. Video recordings of all 2020 Conference sessions and slide decks and summaries from the 2019 Conference are now available on-demand, so you can easily revisit a great idea or stop in on the session you missed last year.

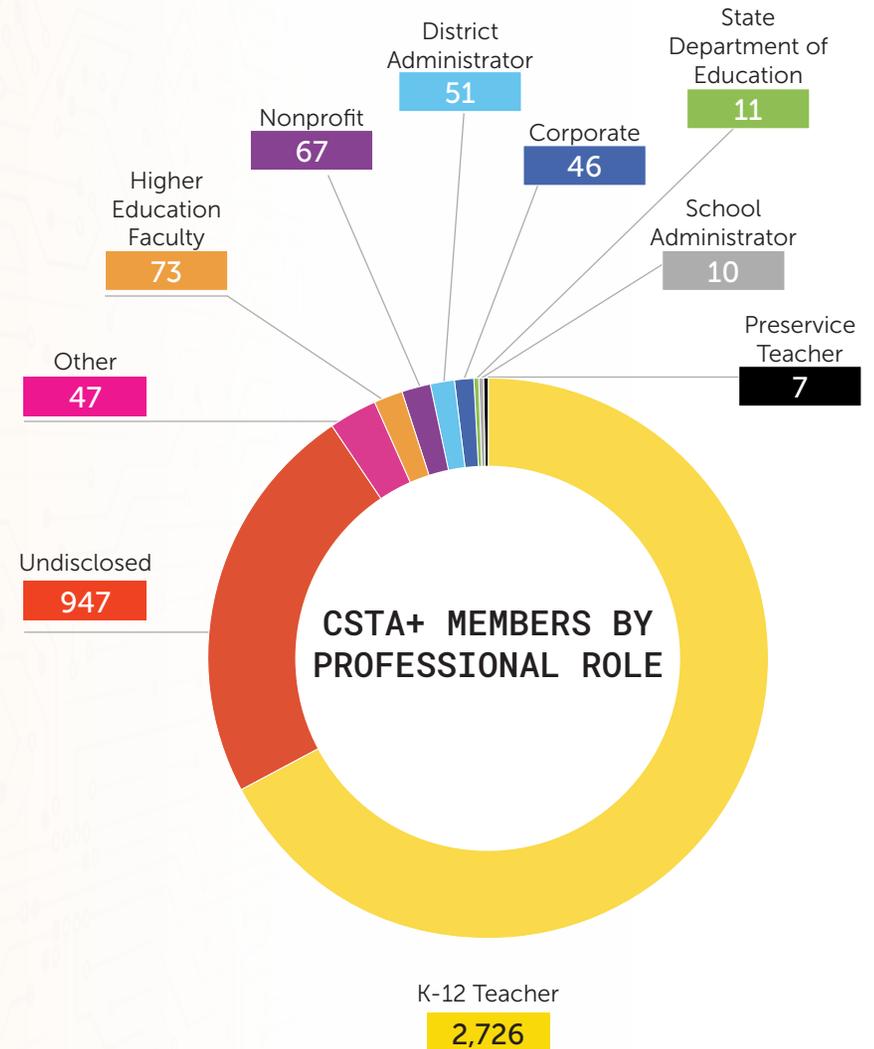
RETENTION AND DEVELOPMENT OF CSTA+ BENEFITS

CSTA is focused on growing awareness of and building upon our CSTA+ membership benefits package. As a result, we've onboarded new benefits providers, hosted webinars on these benefits, and have provided more information to help members take advantage of all of their benefits. As we continue to move forward with the expansion of the CSTA+ benefits package, we will continually look for feedback from current, prior, and potential members to offer a supportive and valuable membership experience.

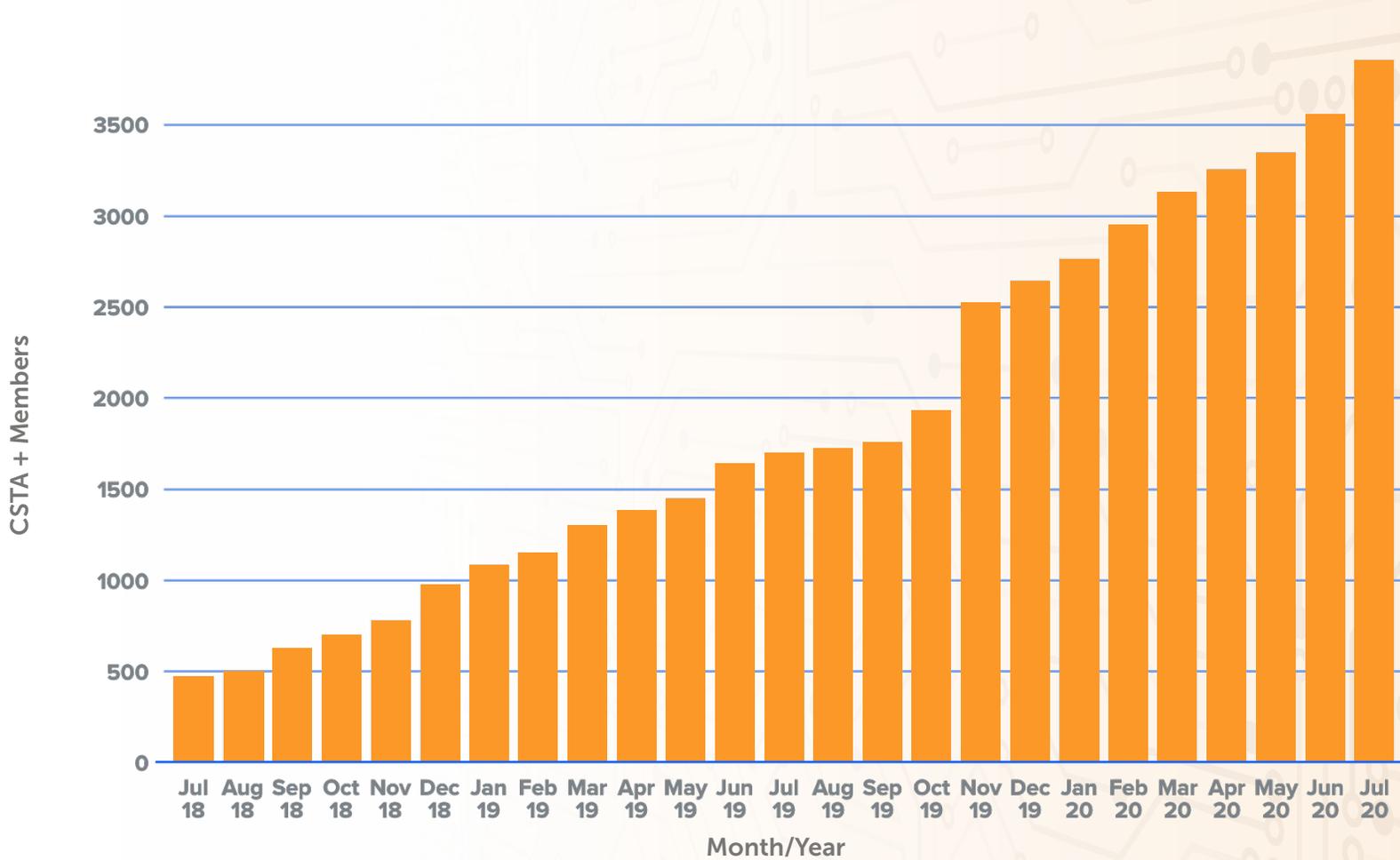
THANK YOU TO OUR CURRENT CSTA+ BENEFIT PARTNERS

ACM
 Birdbrain Technologies
 Chrobotics
 CompuScholar
 Nearpod

Pluralsight One
 Sphero
 The College of St. Scholastica
 We Teach_CS
 Wonder Workshop



CSTA+ MEMBERSHIP FROM JULY 2018 TO JULY 2020



CSTA Launches Equity Fellowship Program



In July 2019, CSTA launched its Equity Fellowship, a selective, year-long program designed to develop leadership in equitable teaching practices and advocacy. Fellows created short flash talks, several of which were incorporated into the keynote sessions

at the CSTA conference. See all of the videos at the bottom of the [Equity Fellowship webpage](#).

The fellows created projects throughout the course of the year, one to highlight is Todd and Cindy's [Create Equity in CS Education website](#). They synthesized seven key themes for how to promote equity in K-12 CS education based on countless interviews and discussions with Equity Fellows and other leaders. Their website provides quotes, descriptions, strategies, and resources for each of these themes.

2019–20 Equity Fellowship

Applicants	112
Fellows	10
Projects	7

“My entire job is about building relationships with students, regardless of their access to resources, regardless of their exposure to computer science topics. If you’re going to say “no” to computer science, say “no” because you’re not interested, not “no” because you don’t know.”

— **Charity Freeman,**
2019–20 CSTA Equity Fellow

CSTA Expands Computer Science Honor Society Program

In the fall of 2019, CSTA took the CS Honor Society national! CSTA+ members have the opportunity to become an advisor to create a program to promote computer science by honoring academic excellence and a focus on service.

Core Values



► **Equity:** A realization that any student has the potential to enroll, to grow, and to excel in computing.

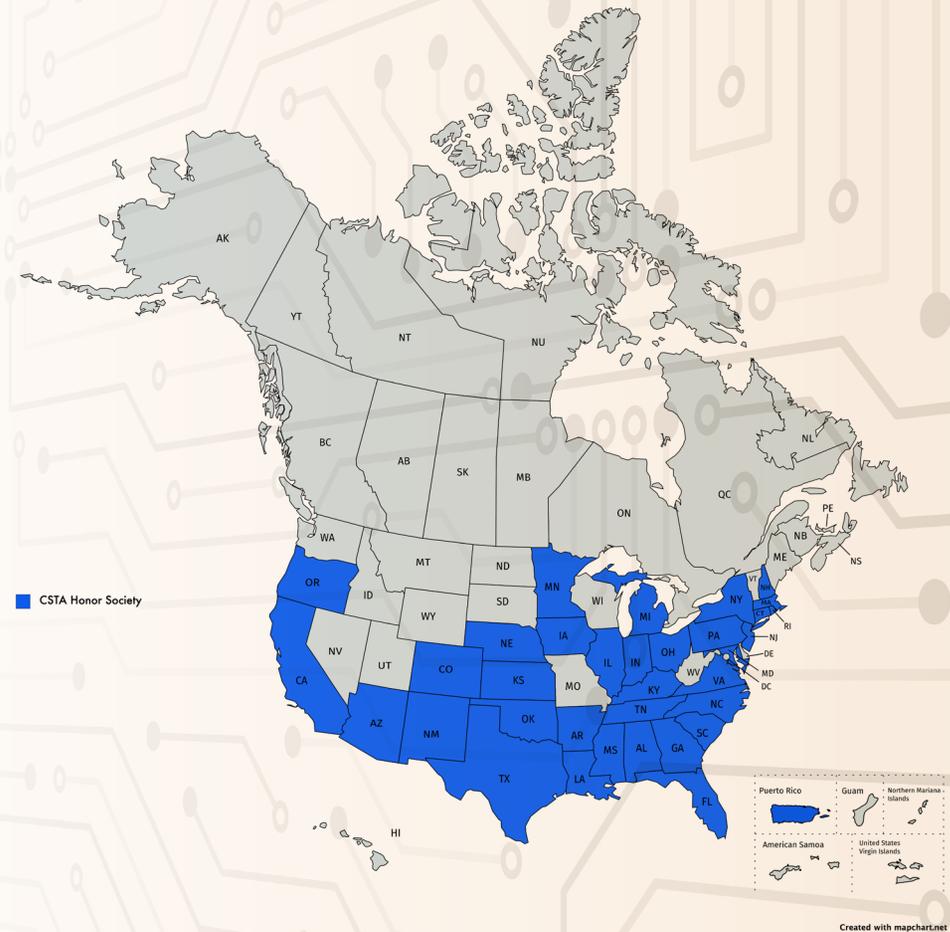


► **Service:** Empowering members to become ambassadors of the computer science discipline, helping underscore its importance as a mainstay in the school and community.



► **Excellence:** A commitment to promoting outstanding scholarship in computer science coursework.

In its first year, over 155 societies were formed, with 172 advisors reaching more than 4,000 students across the United States. Throughout the spring of 2020, we have seen societies pivot to virtual events with online meetings, inductions, and graduation ceremonies, and students looking for ways to give back to their communities in times of need.

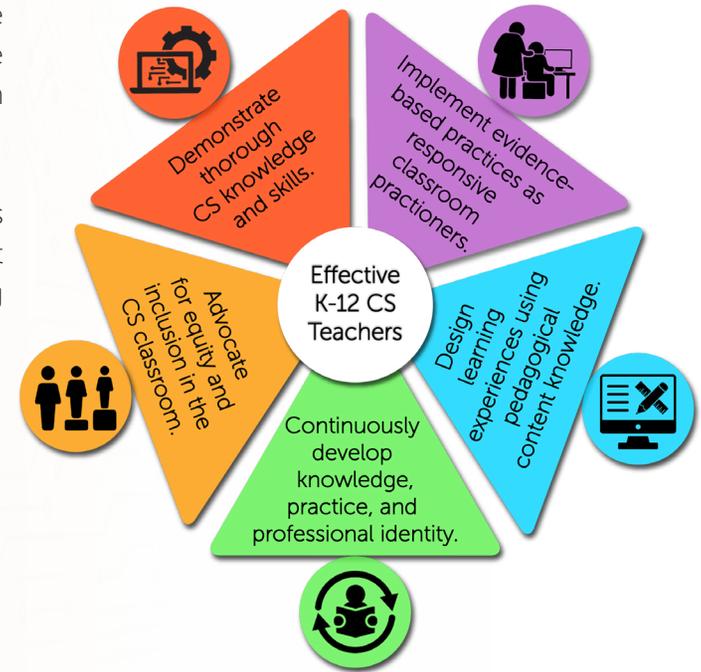


CSTA Publishes Standards for CS Educators

The *CSTA Standards for CS Teachers* are designed to provide clear guidance around effective and equitable CS instruction in support of rigorous CS education for all K-12 students. The purpose is to explain what CS teachers should know and be able to do and to establish benchmarks for professional learning.

CSTA published the standards during CEdWeek in December 2019. Since then, five teams have been working to create a set of resources targeted at specific audiences that will support the implementation of these standards. We published the first set of these resources during the CSTA Conference.

- ▶ **Reflective Teachers:** self-assessment checklist and roadmap for professional learning, to help teachers set prioritized goals for their ongoing professional development
- ▶ **Inclusive Teaching:** synthesis of three interrelated pedagogies: culturally relevant pedagogy (CRP), universal design for learning (UDL), and translanguageing
- ▶ **Guidance for State & School Leaders:** recommendations for how state and school leaders can each support K-12 CS education and the Standards and a classroom evidence (look-for) tool
- ▶ **Guidance for Schools of Education:** case studies, field experiences, and activities exemplifying how colleges and schools of education can create computer science programs using the Standards
- ▶ **Guidance for PD Providers:** rubrics for PD providers to self-assess how well their programs align with the Standards and key principles of effective PD; districts, schools, and organizations may use these rubrics to assess the quality of PD programs they are interested in pursuing
- ▶ **K-12 CS Education Glossary:** a searchable glossary (work in progress) that includes definitions of terms used in the CSTA K-12 Computer Science Standards, CSTA Standards for Computer Science Teachers, and K-12 Computer Science Framework, plus other terms relevant from the fields of education and computer science



Awarding Excellence in Computer Science

CS TEACHING EXCELLENCE AWARDS

2019-2020

Maria Camarena
Daryl R. Detrick
Vivienne Forrester
Mary Heishman
Visa Thiagarajan

Honorable Mentions

Elizabeth A. Dierker
Jennifer Jones
Carolyn A. Petite
Brian Downing Smith
William Warren

2018-2019

Nimmi Arunachalam
Michelle Cannon
Elaine Griggs
Jonathan LoPorto
Laura Ramirez

Honorable Mentions

Michelle G. Lee
Lanna Mack
Andrea Salas
Kristie Steinlicht
Leon Tynes

2017-2018

Sandra Czajka
Martin Fish
Bobby Oommen
Ryan Robidoux
Dylan Ryder

CHAMPIONS OF CS AWARD WINNERS

2019

Axel Toro, *Student Winner*
Laginne Walker, *Teacher Winner*
Paul Foster, *Administration Winner*
Mission Economic Development Corporation,
Organization Winner
Ardey Kell High School, *AP Diversity Award Winner*

2018

Barb Schwamman
Superintendent of Osage and
Riceville Schools

CSTA/ACM CUTLER-BELL PRIZE

2019-2020

Kevin Meng
Lillian Kay Petersen
Axel S. Toro Vega
Zeyu Zhao
Raghav Ganeth, *Honorable Mention*

2018-2019

Naveen Durvasula
Isha Puri
Eshika Saxena
Varun Shenoy

2017-2018

Sreya Guha
Amir Helmy
Amy Jin
Benjamin Spector & Michael Truell

CSTA VOLUNTEER OF THE YEAR

2020

Pat Phillips

2019

J. Philip East

2018

Stephanie
Hoepfner

CSTA Financials

During FY2020 CSTA continued to rebuild the financial foundation necessary for the organization's long-term success. Over the course of the year, we completed the separation of our financial operations from ACM, the last stage in the process of CSTA establishing itself as a standalone 501c3 organization.

	PROGRAM SERVICES		SUPPORTING SERVICES	
	TOTAL PROGRAM SERVICES	MANAGEMENT AND GENERAL	FUNDRAISING	
SALARIES, PAYROLL TAXES AND EMPLOYEE BENEFITS	\$ 819,181	\$ 217,744	\$ 105,845	
PROFESSIONAL SERVICES	55,510	111,070	—	
MEETINGS EXPENSE	587,368	4,034	—	
GRANT EXPENSE	64,054	-	—	
RENT AND OCCUPANCY	55,064	10,130	6,871	
INFORMATION TECHNOLOGY	82,222	2,815	3,282	
INSURANCE	20,165	2,156	1,517	
TRAVEL	106,992	13,963	11,376	
OFFICE EXPENSES	34,687	37,409	1,531	
TOTAL EXPENSES	\$ 1,825,243	\$ 399,321	\$ 130,422	

We're in This Together!

CSTA is able to support K–12 educators thanks to our generous network of partners.

2019–2020 CSTA YEAR-ROUND PARTNERS

Premier Partner:



Strategic Partners:



Partners:



2019–2020 CSTA ANNUAL CONFERENCE PARTNERS

Amazon Future Engineer
Apple
CME Group Foundation
Dominion Energy

Edhesive
Facebook
Github Education
Google
LEGO Education
Micron

Nearpod
Oracle Academy
University of Nebraska Omaha

Institutional Partners

A+ Computer Science
American Computer Science League
Apple
Auburn University
Beanz Magazine
Bootstrap
BootUp PD
BrainPOP
Center for STEM Education, The University of Texas at Austin
CodeHS
CodeVA
Code Spark
College of St. Scholastica
CompuScholar, Inc
Computational Thinkers
Couragion
Goodheart-Willcox Publisher
Happy Code
IBM
Make School
Michigan Technological University
Pace University
Pell City Schools
Popfizz Computer Science
Raspberry Pi Foundation
Stanford University – Computer Science Department
Stockton University
Tennessee Technical University
The University of Texas at Austin – Uteach CS
Trussville City Schools
UC San Diego
University of Alabama
University of DE
Villanova University
Western Carolina University
Wyoming Department of Education

“The Association for Computing Machinery is proud of our longstanding partnership with the Computer Science Teachers Association. As a leader in computer science education at all levels, ACM recognizes that supporting teachers is fundamental to quality computer science education in K-12 settings. With professional development opportunities, scholarships, and initiatives to increase the number of computer science teachers, CSTA is playing an indispensable role in shaping the future of our field.”

— Gabriele Kotsis, ACM President

CSTA's 2019–20 Board of Directors



Jennifer Rosato
Board Chair



Fred Martin
Past Board Chair



Miles Berry
International Board
Representative



Greg Bianchi
Partner
Representative



Dan Blier
School District
Representative



Amy Fox
9–12
Representative



Hai Hong
Partner
Representative



Michelle Lagos
At-Large
Representative



Art Lopez
9–12
Representative



Anthony Owen
State Department
Representative



Jane Prey
ACM Representative



Vicky Sedgwick
K–8 Representative



Bobby Schnabel
Partner
Representative



Kristeen Shabram
K–8 Representative

CSTA would like to give a special thank you to our Board members who completed their terms during this time:

July 2020

Fred Martin
Past CSTA Board Chair

Michelle Lagos
At-Large Representative

Miles Berry
International Representative

Anthony Owen
State Department
Representative

CSTA Team



Jake Baskin
Executive Director



Sarah Johnson
Director of Operations



Bryan "BT" Twarek
Director of Education



LiYana Baker
Office Manager



Jason Bohrer
Chapter Relations Manager



Erika C. Burt
Education Innovation and
Research (EIR) Project Manager



Stacy Jeziorowski
Marketing and
Communications Manager



Michelle Lippoli
Event Manager



Emma Nyssen
Event Coordinator



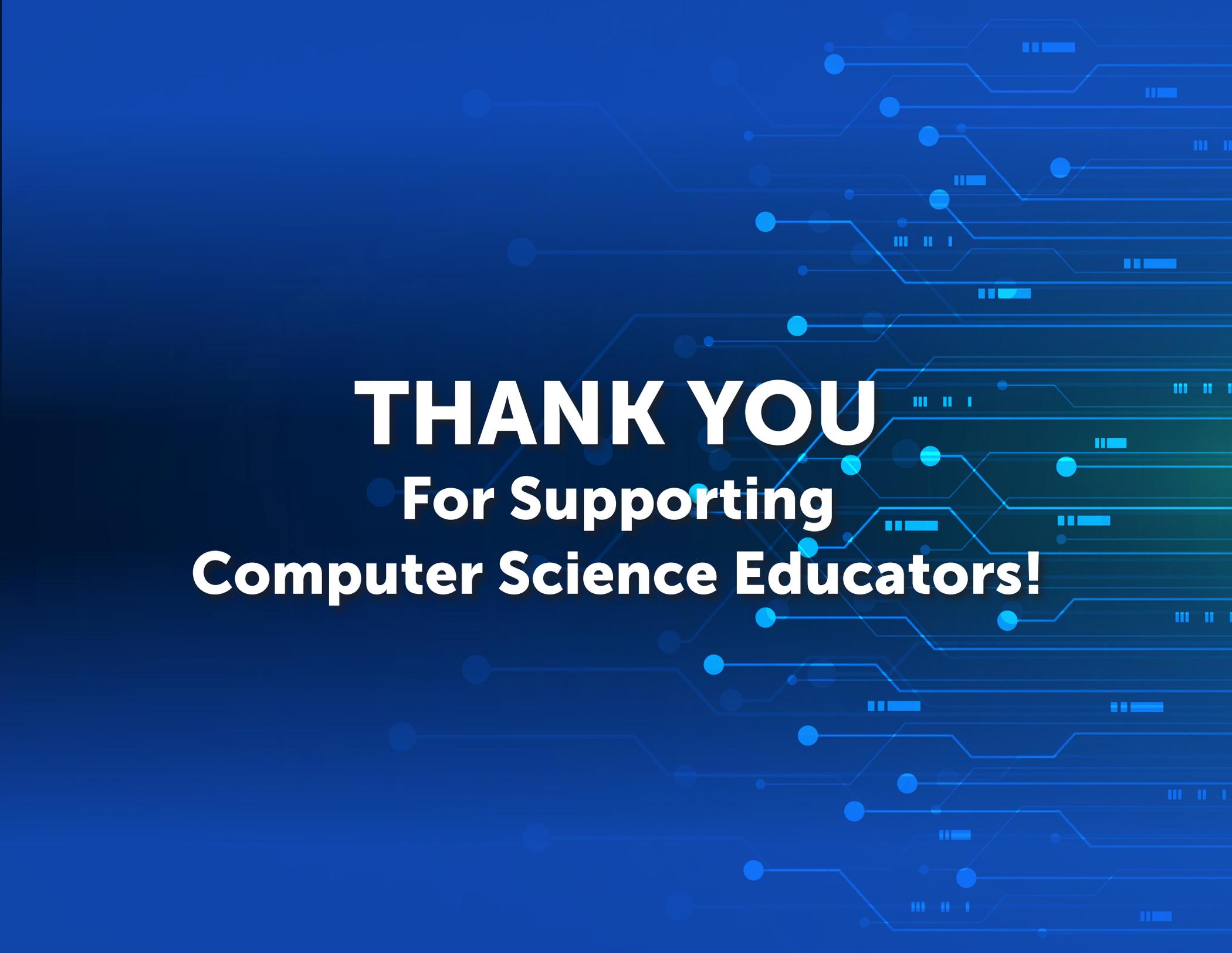
Daniel Rosenstein
Manager of Philanthropy
and Community Partnerships



Cate Sauer
Membership Experience Manager



Carlos Vazquez
Professional Learning Manager



THANK YOU
For Supporting
Computer Science Educators!