Newsletter
May, 2018 (V11 N9)

Your CSN (nee CTN, SIGCT, SIGCS) Officers and Leadership Team provide this publication which is intended to notify you about CSN activities, ISTE 2018 conference info, upcoming events, notable news, resources, links and just about anything else that is useful for CSN members. To contribute to this newsletter, please email Joe Kmoch < joe@jkmoch.com >. Social media information (Facebook, Wiki, LinkedIn and Twitter) is located at the end of this newsletter. The entire CSN Leadership Team is listed on our wiki: http://iste-csn.wikispaces.com/home#Leadership

Table of Contents:

- - - ■ Sign up for their weekly, informative newsletter
      - ■ **new** → Events, CS in the Wild, Open Groups: CSP & ECS
  - ● **Professional Development/Conference Opportunities**
    - ○ **reminder** → Oracle Academy Scholarship for 1st time attendees of CSTA Symposium in July
    - ○ **reminder** → WeTeach_CS Summit 2018, June 18-20 in Georgetown, TX (near Austin)
    - ○ ISTE 2018, June, 24-27, Chicago, IL
    - ○ CSTA 2018 Annual Conference, July 7-10, 2018, Omaha, NE
    - ○ **reminder** → Logo Summer Institutes 2018
    - ○ **reminder** → Scratch@MIT Conference, July 26-28, 2018, Cambridge, MA
    - ○ **reminder** → Scratch Day, December 1, 2018 at Columbia University, NYC
- ● **new** → **Your homework -** one rather large, important reading
- ● **new** → **NCWIT**
  - ○ Resource: How can You Engage a Diverse Range of Girls in Technology - Compugirls
  - ○ **LOOK** → Links to get the new posters and/or the C4C packet
- ● **new** → Links: CodeSkulptor, The Lowly Programmer blog, FreeBookCentre.net
- ● **Appendix A** - Planning for the Winter JCT issue

***

new →new →new →new →new →new →new →new

Jorge Valenzuela - winner of the 2018 Computer Science Network Excellence Award
Congratulations Jorge!

A little information about our 2018 CSN winner

[Jorge Valenzuela](#) has served as an educator for the past 14 years and holds both computer science and administrative credentials. He coaches hundreds of educators- both face to face and virtually in [Computer Science,](#) [Backwards Design Planning](#), [Project-Based Learning](#) (PBL) and the internationally acclaimed [Engineering by Design](#) curriculum. He delivers motivational keynotes for universities, school divisions, and educational organizations and is the lead coach for [Lifelong Learning Defined, Inc](#), a [National Faculty](#) of the [Buck Institute for Education](#) and a National Teacher Effectiveness Coach with the [International Technology and Engineering Educators Association](#).

Kimberly Lane
ISTE CSN PLN President
Blended Learning Specialist
Lancaster ISD

CSN - the BIG Events Being Planned

ISTE 2018 Registration and Housing Now Open

update → **CSN and ISTE 2018**. Based on our experiences in the last two years and with your help, we intend to have the following events in the same or similar format:

- **update** → **CS Firehose** - The ISTE Computer Science Network (CSN) is pleased to announce *CS Firehose 2018* … an intense series of interlocking sessions preceding the ISTE Chicago Conference and Exposition the afternoon of Saturday, June 23 at location TBA in the McCormick Place West building.

  The *CS Firehose* is scheduled from 12:30 through 6:00 PM with sessions which will address the many interrelated educational initiatives, ideas, and curricula which focus on computational thinking and computer science. Three concurrent strands throughout the afternoon are planned … each strand consisting of related presentations or activities provided by quality professional development leaders and educators including those from Microsoft (ISTE Mission Sponsor), Google for Education (ISTE 2018 Gold Sponsor), WeTeach_CS, code.org, MIT Media Lab, BirdBrain Technologies, Unity3D, and many more. And a very special keynote from a true champion of computer science education is scheduled: **Dr. Mitch Resnick**, LEGO Papert Professor of Learning Research at the MIT Media Lab and **creator of the Scratch programming language**. Attendance is FREE but pre-registration is required via the ISTE conference website: https://conference.iste.org/2018/

  The need for CS educational programs is dire with critical worker shortages throughout the field. Yet, at state and local levels, there is a severe shortage of qualified professional educators to teach computer science and cultivate young minds to think computationally. The goal of the Computer Science Network is to help computing educators at every level to discover what is available and to provide the opportunity to immerse themselves in a variety of approaches and curricula. So, plan to join us as we open the valves and turn on the *CS FIREHOSE*!

- **update** → **CS/CT Playground** - Our Playground will again be on Sunday, June 25, 2018 from 12:30pm - 4:00pm and be in a high traffic area. We continue our goals to engage those registering and to increase interest in computer science (CS) and computational thinking (CT). Our intent with the exhibits is to not duplicate sessions and posters which occur abundantly throughout ISTE 2018. Instead we find opportunities to engage students and adults to demonstrate exciting technologies being used in classrooms.
    - A team from Code.org led by Megan Cicconi will involve visitors with various aspects of the Code.org curriculum;
    - We intend to engage Chicago Public Schools students in demonstrating

curriculum used in the CSForAll project
- ○ We will have students exhibiting projects using various technologies including robotics and other physical computing as well as fablabs and other "different" experiences with free and commercial products.
- ○ NCWIT will have a significant presence in our Playground with their Aspirations and Aspire-IT programs as well as their materials.
- ○ Want to be involved? Contact Joe Kmoch <joe@jkmoch.com>
- **CS/CT Strand** throughout the Conference - Look for the sessions identified as CSN Picks for sessions we believe are particularly appropriate to CS and CT in addition to other CS-oriented strands based in other domains
- **The Second Annual CSN Excellence in Education Award Plaque will be awarded to Jorge Valenzuela during ISTE (see the top of this newsletter for more about Jorge).** This recognizes exceptional educators and leaders who are championing the cause of improved Computer Science and Information Technology education. Those recognized demonstrate exemplary work providing a model for teaching, learning and leading in this endeavor.
- **Produce a list of activities** of interest to CSN members - we will continue to produce a list of sessions, posters, panels, etc which may be of interest to all or a segment of our CSN membership; for 2017 this list exploded to about 160 such activities, about 3-4 times as many as the previous year.
- **CSN Members Discussion** - the CSN Leadership will again schedule the PLN Lounge where the membership and leadership can talk about the future activities of CSN.

Other CSN activities at ISTE 2018 will include:
- **Collaborators.** We engage these groups: NCWIT, the local CSTA chapter, WeTeachCS.org, CS4TX.org and Code.org in our efforts again.
- Involvement in the **Communities Networking Fair** (Professional Learning Networking Fair) on Sunday, June 24, 2018 from 3:00pm - 5:00pm
- **Activities around our CS/CT book series**
- **Specific K-8 Activities** and Discussions.
- A **CSN Social** co-hosted with NCWIT at a local establishment.

If you are interested in helping develop these ideas or have additional ideas, please contact the editor of this newsletter <joe@jkmoch.com>

*** Plan on exciting times at ISTE 2018! ***

Computer Science Network News

updated → Webinars, Webinars, Webinars!

Foundations of Coding in the Early Years. This webinar was hosted by the Early Learning Network in mid-April, 2018. Simon Helton posted a topic in the CSN Discussion Forum and provided this link to register for it and receive a link to the recorded archive of this webinar. <https://docs.google.com/forms/d/e/1FAIpQLSdoTx_IMNIREqZBaSOOqoISYvH7wh6ymZla-lv_QY_Ts54sfg/viewform>

Recent NASA Webinar with tremendous set of resources.

Here is the archive from the workshop:

Resources from the virtual workshop - please see the April, 2018 issue of this newsletter

Another excellent webinar with plenty of great resources → Google's Resources for K-12 Computer Science. Tiffany Walter - the Educational Program Manager from Google presented the large variety of resources freely available from Google. Prizes were given away at the end of the webinar (see what you missed by not attending live?)! This webinar, originally recorded in mid-March, 2018, is archived at <http://iste.adobeconnect.com/pry8l5z15nei/> and definitely worth your time.This is part of our CSN Webinar series.

A super important topic and the basis for CSForAll (and we really mean ALL) → Digital Equity in Computer Science. A discussion focused around this topic presented by the ISTE Digital Equity (DE) PLN. Panelists included our own CSN President, Kimberly Lane Clark, a Blended Learning Specialist in Texas; Jason Chong, Teacher on Special Assignment in Fullerton, CA; Tara Linney, Ed Tech Coach; and Wes Kriesel, Director of Innovation and Instructional Support. Kim and Tara have both recently presented webinars that are listed here. <http://bit.ly/DEwebFeb2018>

Another recent webinar from our CSN President, Kimberly Lane → Integrating CS Across the Curriculum. Our CSN President, Kimberly Lane, led this ISTE Expert Webinar in late January, 2018. Just like reading and writing, knowledge of computer science is foundational for all students in the digital age, and yet many schools don't teach it, especially in elementary grades. In this webinar, participants will learn how to begin to integrate computer science into curriculum using Code.org, Scratch, Google CS First and many other resources. To view this webinar go to <http://iste.adobeconnect.com/pb7pihuvsra6/>

ISTE Professional Learning Series Archives
Go to <https://www.iste.org/events/webinars> and scroll down to view these archives. You'll likely be interested in the following:
- **Bring Coding into your Classroom -** an ISTE/Verizon/Innovative Learning webinar originally presented on November 28, 2017; access the link to the recorded **archive** (approx. 63 min.), related resources from the webinar, additional ISTE resources (see the December newsletter for much more detail available here).
- **CoDrone and Coding in the Classroom** -
- **Coding for All**
- **Coding in the Curriculum** -
- **Girls CAN Code**
- Note - detail for each of these is in the December newsletter available here

As we develop our CSN Webinar series into the future, we certainly invite your ideas and interest in volunteering. Please contact our Professional Development chair, Heidi Williams <heidi@stretchinstructor.com>, with your ideas and your interests. Eight webinars from previous years are at our wiki site <http://iste-ctn.wikispaces.net/Current+Webinars>
***

updated → CS in K-8 #CSK8 Twitter Chats. These popular hour-long Twitter chats continue on the 1st and 3rd Wednesdays of every month at 5pm PT/8pm ET. Coming up:

- The May Twitterchats will be May 2 and May 16, 2018
- The final chat will occur on June 6. 2018

The co-leaders are Vicky Sedgwick and Sheena Vaidyanathan. Also, Vicky and Sheena host a Google+ community for K-8 CS <https://plus.google.com/communities/1118dsaaa03101139836526905>

Computing Education News

Good stuff → <u>I think we need more women in STEM because</u>. This is a three part series of short videos (59-92 seconds). Only 16% of Australian STEM professionals are women. (It's about the same in the U.S.). To find out why this figure should change, Careers With STEM asked why we need more women in stem. The interviewees' answers will inspire you and your students. This goes beyond just computer science, but the issues are the same. <https://careerswithstem.com/women-in-stem-video-1/?mc_cid=f4e0db2f76&mc_eid=2e1eeedbeb>

New videos from Code.org. There is quite a library of videos on the code.org site at <https://code.org/educate/resources/videos>. Two of the most recent are a series of six short videos focused on How Computers Work and seven short videos focused on How the Internet Works". These are very well produced professional videos featuring an array of young professionals of any ethnicities and both genders. Check these out!

*****

reminders:
Stack Exchange for CS Educators
Careers with Code 2017.

*****

new stuff → CS for All Newsletter. This excellent resource is available if you Join the CSForAllTeachers Community and sign up for the CS for All Teachers Notifications and the Newsletter. Recent blog posts, upcoming webinars and resources are noted in their weekly newsletter. Here are recent entries:

EVENTS - Recent and Upcoming:

- WEBINAR - Fun with Micro:bits! How This Tiny Computer Can Bring Learning and Fun to Your Classroom on 2018-04-09 19:30
- WEBINAR - CS in K-5 Making on 2018-04-12 19:30
- WEBINAR - Getting Students to become Storytellers with Data on 2018-04-25 19:30
- WEBINAR - Classroom Practices for Modeling Virtual Reality on 2018-05-01 19:30
- STEM for All Video Showcase - Transforming the Educational Landscape from May 14-21, 2018 - save the dates; *http://stemforall2018.videohall.com* and http://bit.ly/stem-video-showcase
- BJC CSP Professional Development in So. Utah on 2018-06-04 09:00
- BJC CSP Professional Development at Florida A&M University in Tallahassee, FL on 2018-06-18 09:00

CS in the Wild
DISCUSSIONS:

- How do you use Virtual Reality in your Classroom? updated on 2018-04-19 19:37

CSP Open Group
DISCUSSIONS:

- **Data and Story Telling - Fun Webinar this Wednesday 4/25 at 7:30 pm ET** updated on 2018-04-24 00:56

RESOURCES:

- **Priming the CS Teacher - a report by a NSF sponsored event** updated on **2018-04-24 14:53**

ECS Open Group
DISCUSSIONS:

- **Unit 6 Robotics PD 4-2018** updated on **2018-04-20 21:59**
- **How Do You Talk About Data - Join us this Wednesday 4/25 to hear from Kevin Barry from Maryland** updated on **2018-04-24 00:54**

Professional Development/Conference Opportunities

reminder:

Oracle Academy Scholarship for 1st Time CSTA Attendees Returns for 3rd Yr!

CSTA and Oracle Academy are delighted to announce that applications for Oracle Academy Scholars - CSTA Conference Scholarships are now open! For the third consecutive year, Oracle Academy will be helping to send outstanding first-time conference attendees to the annual CSTA conference. Thirty three scholarships will be awarded. For more information see the April 2018 CSN Newsletter or refer to the CSTA website <http://csteachers.org>

Here is the link to apply for these funds:
https://docs.google.com/forms/d/e/1FAIpQLSf1nJ8aZkYPV_Z1E3YmKrHhQPTNNKZu9u5s0nea SM1RyAK9PA/viewform

Conference link and information is below.
***

New →WeTeach_CS Summit 2018. The WeTeach_CS Summit is a 3-day event which
                educates, empowers, and inspires K-12 CS teachers, advocates,
                administrators, professional development providers, university instructors, and
                policy-makers to advance the goal of CS for All in Texas and beyond. This
                excellent conference will be held June 18-20, 2018 at Georgetown, TX (near
Austin). Registration opens March 28, 2018. Full details at:
https://www.weteachcs.org/event/weteach_cs-summit-2018/
***
CSTA 2018 Annual Conference. Get ready for this always excellent conference totally
                focused on K-12 computer science. The dates are July 7-10, 2018 in
                Omaha, NE. Plenty of workshops, sessions, opportunities to network and
                have fun together with colleagues from across the country who share the
                same joys. <https://www.csteachers.org/page/2018conference>

**

Reminder → Logo Summer Institutes. Plans for the 2018 Logo Summer Institutes are
underway. The following are confirmed with more dates and locations to be announced shortly
- June 11-14, 2018 in Austin Texas
- July 9-12, 2018 in New York City

These workshops are intensive immersions in creative computing for K-12 teachers, parents
and technology integrators. Their approach to teaching and learning is progressive,
project-based, and learner-centered. Learn to code as you explore and create projects using
Scratch, Makey Makey, Hummingbird, Arduino and a variety of other hardware and software
platforms. For more information and to register visit <http://logofoundation.org/summer>
***

Remindeer → Scratch@MIT Conference: The Next Generation. Join us for the
                                Scratch@MIT conference on July 26-28, 2018 in Cambridge,
                                MA. This is a playful gathering of educators, researchers,
                                developers, and other members of the worldwide Scratch
community.We're planning a very participatory conference, with an entire day of hands-on
workshops and lots of opportunities for peer-to-peer discussion and collaboration. The
conference is intended primarily for adults who support young people learning Scratch.
Registration is open NOW. <https://scratch.mit.edu/conference/>
***

For your future planning → Plans are already being made for the next Scratch Day on
                        December 1, 2018 at Teachers College, Columbia
                        University, New York City.   There will be workshops on a
                        wide range of Scratch topics for Scratch beginners and
                        those who have been Scratching for years. Scratch Day is
                        for people of all ages

- Teachers, bring your students!
- Parents, bring your children!
- Children, bring your parents and teachers!

Please go to <http://logofoundation.org/scratchday> to see what happened at Scratch Day in December, 2017 and in previous years.

NEW → *Your Reading Assignment*

Priming the Computer Science Teacher Pump. This recently released report focuses on integrating computer science education into Schools of Education. This is an excellent report based on a workshop held earlier in 2018. There are many ideas and recommendations which apply to both pre- and inservice teachers. This is worth the time to read. <https://s3.us-east-2.amazonaws.com/home4cs/Priming+the+CS+Teacher+Pump+Report+FINAL+FINAL+.pdf>

… From the April, 2018 issue of this newsletter

Tech industry's diversity efforts haven't lived up to promises. A new report explains why. While not directly applicable to the high school classroom, this provides some insight into the issues around diversity in CS/IT. <https://www.usatoday.com/story/tech/2018/02/28/diversity-freada-kapor-klein-kapor-center-report-leaky-pipeline/378295002/>

Diversity Gaps in Computer Science. Continuing on the diversity theme, Google and Gallup continue working together on research in this area. This partnership identifies structural and social barriers students face at home, in schools and in society that could influence their likelihood to enter the computer science field. This is a 2016 report but bears repeating. <http://news.gallup.com/reports/196331/diversity-gaps-computer-science.aspx>

Five Approaches to Closing the Soft Skills Gap - very important in CS and Computational Thinking, the 21st Century Skills will allow students to more fully participate in our technology-driven future. "Whether you call them soft skills, workforce-ready skills, or 21st century skills, discover how businesses are partnering with school districts to equip students with the necessary skills to succeed in college and careers. This resource provides practical recommendations for businesses and schools seeking to make an impact together and profiles five successful partnerships established by Nike, Ernst & Young, Wegmans, Wynn Las Vegas, and the Northern Kentucky Education Council." You can get this report by going to this Education Week site <https://fs24.formsite.com/edweek/form466/fill?7=EBLAST> Then go ahead and read it and let's discuss!

Monthly CSN Newsletter readings January 2018 - March 2018
<http://istecsn.pbworks.com/w/page/125926169/Monthly-Newsletter-Readings>
Monthly CSN Newsletter readings Oct 2012 - December 2017
<http://iste-csn.wikispaces.com/Monthly+Newsletter+Readings>
***

National Center for Women and IT (*www.ncwit.org*)

The National Center for Women & Information Technology (NCWIT) is a non-profit community of more than 1,100 universities, companies, nonprofits, and government organizations nationwide working to increase girls' and women's meaningful participation in computing. NCWIT equips change leaders with resources for taking action in recruiting, retaining, and advancing women from

K–12 and higher education through industry and entrepreneurial careers.
Find out more at www.ncwit.org/resources or email us at info@ncwit.org

NCWIT Resource of the Month:
Get new posters below

How Can You Engage a Diverse Range of Girls in Technology?
www.ncwit.org/compugirls

Culturally Responsive Computing (CRC) programs help educators connect computing curriculum to the interests, prior experiences, and needs of students diverse in race, class, ability, and sexual orientation. One such promising program is COMPUGIRLS.

Visit www.ncwit.org/resources for additional resources; email info@ncwit.org to request hardcopy resources.

LOOK → **HOW TO GET THESE** **FREE** **POSTERS and other C4C materials**
To get the C4C Counselors Kit: https://www.ncwit.org/counselors-computing-c4c-kit-request-form
To get the Posters + related material: https://www.ncwit.org/resources/stephanieweber/c4c-plus-kit
To get just the Posters: https://www.ncwit.org/resources/customcatalog/c4c-posters

****

Several links...

If you have favorite links you'd like to share (we could use some on IT topics such as networking, support, information systems and web design), please email Joe Kmoch.
< joe@jkmoch.com >

This month…

CodeSkulptor - Tried this with Python? CodeSkulptor is a browser-based Python interpreter, as featured in the online course "An Introduction to Interactive Programming in Python". It implements a subset of Python 2, plus the addition of three graphical libraries, SimpleGui, SimpleMap, and SimplePlot. <http://www.codeskulptor.org>

The Lowly Programmer - a blast from the past, Eric Burnett, a software engineer at Google for a time wrote this blog. Though his last post was in 2012, there's a lot of interesting topics in computer science and mathematics that he explores over his several years of entries. Worth reading if you want to challenge yourself! <http://www.thelowlyprogrammer.com>

FreeBookCentre.net - this appears to be a legitimate site which contains links to thousands of free online technical books. They include core computer science, networking, languages, systems programming books, Linux books, etc. There are also selections of Math, Physics, Electronics and Medical Books - all free. <http://freebookcentre.net>

****

Contact Joe Kmoch <joe@jkmoch.com> to include an item in the next issue.
Social media links:

- CSN Community: <http://bit.ly/computing_teachers_network> (site registration needed)
- CSN on Facebook: <https://www.facebook.com/pages/ISTE-CTN/132261473482000>

- CSN on ISTE Wiki: <http://iste-csn.wikispaces.com> also <http://istecsn.pbworks.com>
- CSN on LinkedIn: <https://www.linkedin.com/groups/6784194/profile>
- CSN on Twitter: <https://twitter.com/ISTE_CTN>

reminder → Joining the ISTE Website and Communities.   If you have not already signed up for our Computer Science Network **please visit the site** <http://connect.iste.org/connect/learningnetworks>, choose Computing Teachers Network.

Appendix
reminder → *Journal for Computing Teachers (JCT)*

> The Journal for Computing Teachers (JCT) Fall 2015 issue is now available in the resources section of the ISTE.org website <http://www.iste.org/resources/searchresults?searchterms=jct>. There you'll actually see all of the complete issues for the past few years. You can go directly to the Fall 2015 issue by surfing to <https://www.iste.org/resources/product?ID=3772>. Soon it will also be on our CTN Wikispace.

Our editor Lucianne Brown is currently looking for papers and articles for the **Winter 2018 JCT.** The editor and our peer reviewers professionally offer critical suggestions for the writers to edit and produce a high quality article. If you have any questions, contact Lucianne Brown, Editor of JCT at docbrown1944@gmail.com or lbrown3@govst.edu

JCT is the only refereed journal oriented around K-12 computing education and one of only three journals published by ISTE. The previous complete JCT issues are available online along with the new current issue. Head to this url: <https://www.iste.org/store/publications/downloads/jct>