Newsletter
April, 2019 (V12 N8)

Your CSN (CTN, SIGCT, SIGCS) Officers and Leadership Team provide this publication which is intended to notify you about CSN activities, ISTE 2019 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, pbworks Wiki, LinkedIn and Twitter) is located at the end of this newsletter. The entire CSN Leadership Team is listed on our wiki: http://istecsn.pbworks.com

Table of Contents:

- **update →** ACSL Competition, fourth round ends Friday, April 19, 2019
- Robo Expo 2019 in New York City, April 14, 2019.

- **Professional Development/Course Opportunities**.
  - Introduction to Computational Thinking for Every Educator (Summer)
  - **reminder →** Foundations of Computer Science for Teachers: Praxis Prep
  - University of Texas at Austin Computer Science Education Courses
  - **new →** Raspberry Pi Foundation Free Courses
- **Professional Development/Conference Opportunities**.
  - **reminder →** Inaugural Symposium on Computer Science and Learning Sciences
  - ISTE 2019, June, 23-26, Philadelphia, PA
  - WeTeach_CS Summit 2019 near Austin, TX
  - **new →** Beauty and Joy of Computing Workshops this coming summer
  - **new →** Free Week-long CS and Making PD at Infosys Pathfinders Summer Inst.
  - **reminder →** CSPDWeek at Colorado School of Mines week of July 22, 2019
  - Logo Foundation Summer Institute July 22-25, 2019 in NYC
  - **reminder →** Scratch Day at Teachers College Columbia, December 7, 2019
- **new → Your homework -** Two articles
- **new → NCWIT**
  - Resource: Computer Science for Everyone - a Toolkit for MS and HS
- **new →** Links: CMIU CS Academy (Python), UnrulySplats - a physical coding environment
  for K-8, Free Online Computer Science Courses

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Computer Science Network Events

Planning continues for ISTE 2019 in Philadelphia, June 23-26, 2019

Consider volunteering for the following activities

*Please **fill out this form** if you are interested in volunteering...

- **Updated → Creating with CS** - Come join us on Sunday morning, June 23, 2019, to learn about new hands on approaches to computing education that combines the magic

of doing, creating and making with the power of code, in a way that engages every student in active computational thinking. The maker education movement has proven to engage and interest girls and other nontraditional CS student populations through creative, personally meaningful projects. Learn how combining the maker mindset with computational thinking can result in transformative learning experiences for all students.

The '**Creating with CS**' sessions will be hands-on sessions with as much time devoted to coding, making and creating as possible. Participants will leave with knowledge of how to create block-based and text-based programs in different environments such as scratch, makecode, python etc. and move them onto a variety of physical computing devices to create physical interactivity with the computational world. They will also get an introduction to design thinking and how it can be used to provide context to coding activities, which research shows is effective in attracting students of all genders to programming. Finally, teachers will see lots of examples of real student projects aligned to ISTE CS Standards, CSTA and STEAM content standards.

- **Updated → CS/CT Playground -** We continue our goals to engage those attending and to increase interest in computer science (CS) and computational thinking (CT). Thus far we will have exhibits from Robolink CoDrone, Scottie Go, Funecole Curriculum and Calypso/Cozmo/AI4K12. Others we are talking to include Merge Cube/CoSpaces, K-8 robot programming in Philadelphia School District, NCWIT, MicroBits, BlocksCAD3D, and Hands-On Coding.

  Our intent with the exhibits is to not duplicate sessions and posters which will occur abundantly throughout ISTE 2019. Instead we find opportunities to engage students and educators to demonstrate exciting technologies being used in classrooms. **We need help finding students and teachers in the Philadelphia area who are doing interesting things with computer science and computational thinking**. We will again have a double sized area directly opposite of the registration area (so we'll likely have even more attendees than ever). Our Playground will occur on Sunday, June 23, 2018 from 1:30pm - 4:30pm

- **CS/CT Strand** throughout the Conference - If you only have a few hours of time, but want to make a difference in CS education, volunteers will look for and recommend sessions to be identified as CSN Picks for the ISTE 2019 conference. We look for sessions we believe are particularly appropriate to CS and CT in addition to other CS-oriented strands based in other domains. Last year we had over 150 activities identified and we will likely have many more in 2019.

- **The Third Annual CSN Excellence in Education Award.** This award 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. Previous winners have been Kimberly Lane Clark (2017 and our current CSN President) and Jorge Valenzuela (2018 and now a CSN Leadership Team member)

- **CSN Members Discussion** -We are gathering volunteers who are passionate about discussing relevant CS topics. For this volunteer activity, ISTE Connect CSN members will be asked to moderate 1 question, 2 times per year on a topic you are passionate about. A calendar will be sent out so that you know which months you are responsible

for.

Other CSN activities at ISTE 2019 will include:

- Focus on new ISTE Computer Science Educator Standards
- Involvement in the **ISTE Communities Networking Fair** (Professional Learning Networking Fair) on Sunday, June 23, 2019
- **Activities around our CS/CT book series**
- **Specific K-8 Activities** and Discussions.
- **Activities with our collaborators** - NCWIT, the local CSTA chapter, WeTeachCS.org, CS4TX.org and Code.org

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

*** Plan on exciting times at ISTE 2019! ***

ISTE Computer Science Network News

Update → Webinar: How to Develop Computational Thinkers
presented by Jorge Valenzuela
Register here to get the recording.

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Reminder → Standards for Educators: Computational Thinking Competencies
Download them at <https://www.iste.org/standards/computational-thinking>
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Update → Interested in an awesome Professional Development Opportunity?
We have created a QUICK (four questions) survey so that you can let us know what you need. There is an open-response question at the end and we would love to hear other ideas and needs from you. We exist to support and empower YOU!

Please complete the following survey: CLICK HERE - https://goo.gl/forms/kZTgslDlqDSoDWU92
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New → Computer Science Network Discussion Forum on ISTE Connect
Recent topics have included:

- K-12 Curriculum
- Online Computer Classes
- In the recent past,,,
    - K12 Coding Plan at District Level Request
    - Online CS Curriculum
    - Summer Study for HS Girls?
    - Impacts of Computing

To get to the CSN Discussion area:
<https://connect.iste.org/communities/community-home/digestviewer?communitykey=6fed01aa-9e1f-4c27-87d1-95d0afcbbbeb&tab=digestviewer>

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CSN Webinars: 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.

Computing Education News

NEW →2019 CSTA/Infosys Foundation USA Awards for Teaching Excellence

The Awards for Teaching Excellence are designed to recognize outstanding teaching by K–12 computer science teachers. Winners demonstrate their excellent work inspiring students to explore the computer science field; effectively engage students in learning rigorous, standards-aligned, computer science content; and a focus on broadening participation of underrepresented students in computing. Applications are open now and must be completed by 11:59 p.m. in your local time zone on **April 14, 2019.**

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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 for the 2018-2019 school year. Coming up: March and April Twitter chats will be

- April 3 “Computational Thinking”
- April 17 “Equity, Ethics & Diversity in K-8 CS”
- May 1 “Project Based Learning in K-8 CS”
- May 15 “Professional Development”
- June 5 - last CSK8 Twitter chat

The co-leaders are Vicky Sedgwick and Sheena Vaidyanathan. Vicky and Sheena host a Google+ community for K-8 CS <https://plus.google.com/communities/1118dsaaa03101139836526905> and a Facebook group: <https://www.facebook.com/groups/CSTAK8/>. You can see their calendar at https://calendar.google.com/calendar/embed?src=8l8em5hfa1f8456abbicqac3r8%40group.calendar.google.com&ctz=America%2FLos_Angeles

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Reminder → New Special Reports: **Computer Science Education Week**

2018 (and beyond)

For Computer Science Education Week this year, the CS Bits and Bytes authors shared features about NSF-funded resources that enable computing education for *all* students. For information on each of the five features produced either consult the last few issues of this newsletter or click on this link: <https://www.nsf.gov/cise/csbytes/> You'll see the CS Education Week 2018 item part way down the page

Reminder → **NSF CS Bits and Bytes** - Highlighting innovative Computer Science Research. Your feedback is welcome at CSBitsandBytes@nsf.gov To subscribe and receive information and a link to each new issue, please send a blank email to <csbytes-subscribe-request@listserv.nsf.gov>

New issue → **Celebrating Black Women in Tech - vol 5 #8**

Mental health is our emotional, psychological, and social well-being. It affects how we think, feel, and interact with others. While many people could benefit from resources regarding mental health, social stigma and lack of information can prevent them from seeking them out. Using a big data technique called text mining, important issues for addressing mental health are being analyzed and used to create resources for those who need them. MyHealthImpact is a social network which helps students navigate health information, explore resources and connect with others who may be going through similar experiences. It was created by computer Scientist Dr. Fay Cobb Payton and her students.

New issue → **Detecting Phishing - vol 5 #9**

Phishing attacks are used to trick online users to provide sensitive information, such as passwords or credit card numbers. Even though cybersecurity measures exist to stop phishing, attackers constantly change their tactics to deceive users and evade detection. Research combining human and computer intelligence is helping to combat this problem.

New issue → **The Power of Static - vol 5 #10**

Ever experienced a shock after walking on carpet in your socks and touching a doorknob? Does your hair stick up after you run a plastic comb through it? These are examples of the **triboelectric effect** (sounds like "tri-bo-electric"), a form of static electricity. Scientists are using nanotechnology to understand how to harness this phenomenon as a new source of energy to power electronics.

Previous issues:
Vol 5 #1: **Brain-controlled Drones**
Vol 5 #2: **The Big Data of Lyme Disease**
Vol 5 #3: **Augmented Reality**
Vol 5 #4: **3D visualizations**
Vol 5 #5: **DNA Memory Chips**
Vol 5 #6: **Floodaware**
Vol 5 #7: **DIY Engineering/Paper Mechatronics**

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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:

BLOG POSTS:

- NASA's App Development Challenge has begun! Register by April 10. published on 03/26/2019
- Escape the CS Classroom! published on 03/14/2019
- How Makers Make Classrooms Inclusive - Check Out the Twitter Archive! published on 03/12/2019
- Reflections on Black History Month published on 03/01/2019
- Community Spotlight: Tina Boyle Whyte published on 02/27/2019
- Computer Science Absolutely Matters in Communities of Color published on 02/11/2019
- 5 ideas for promoting student reflection published on 02/08/2019

DISCUSSIONS:

- CS Principles Professional Development Summer 2019 with the Beauty and Joy of Computing published on 03/27/2019)
- Bach-lash: Machine Learning and Music published on 03/25/2019)

UPCOMING EVENTS:

- **Cooperative Learning Practices + Student Engagement in the CS Classroom** on 04/11/2019) Description: Looking for ways to increase student engagement in your CS classroom? Come join us on Thursday, April 11 at 4:30pm Pacific/ 7:30pm Eastern to learn more about cooperative learning practices in CS. This webinar will provide you with a better understanding of the practices introduced by Kagan, which can be used with students from kindergarten to twelfth grade. We will look at how these practices can be applied through grouping strategies, share-outs, and wrap-up activitiesâall of which are fun, interactive, and memorable. Access the meeting room here: http://air.adobeconnect.com/nicole/ Audio information will appear once you've entered the meeting room. Choose dial-out for the best audio experience, or you may listen via computer speaker.

RESOURCES:

- Finch Loan Program Open published on 03/25/2019

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Reminder → Amazon launches 'Amazon Future Engineer' program to support cs education

Amazon is officially launching a new program it calls "Amazon Future Engineer," a broad, community-based push into schools and education that represents a renewed emphasis on education, an area in which it's had mixed success. See their site and the January 2019 issue of this newsletter

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Reminder → AI for K-12 (that's Artificial Intelligence for K-12). This group jointly sponsored by AAAI and CSTA is developing national guidelines for AI education for K-12 and developing an online, curated resource directory to facilitate AI instruction. They will be presenting sessions at both the upcoming SIGCSE 2019 and ISTE 2019. They will also be presenting at our ISTE CSN Playground. If you are interested in following this group and their work, please join the AI for K-12 mailing list by sending an email to ai4k12@aaai.org and requesting inclusion in their mailing list.

Student Opportunities

EXPLORE MOON to MARS

APP DEVELOPMENT CHALLENGE: ASCENT ABORT 2

CALLING ALL MIDDLE AND HIGH SCHOOL STUDENTS AND EDUCATORS!

NASA's App Development Challenge (ADC) has begun! The challenge provides middle and high school student teams the opportunity to demonstrate the practice of coding and app development. The ADC asks student teams to develop an app that visualizes three minutes of simulated test data in support of the upcoming Ascent Abort-2 (AA-2) flight test.

In June 2019, NASA will launch a full-stress test of the Orion spacecraft's Launch Abort System (LAS), called Ascent Abort-2, which will demonstrate the LAS can send Orion and its crew a safe distance from a failing rocket if an emergency arises during ascent to orbit. This flight test is a critical step to demonstrate Orion's safety as NASA leads the next steps of human exploration into deep space.

In Round 1 of this challenge, participants will have the opportunity to chat with NASA subject matter experts to learn tips on how to make the app the best it can be. Teams will then post videos of their app designs online for consideration by NASA to use in future missions. In Round 2, teams with favorable submissions advance to present their app in an interview with NASA engineers working on the AA-2 flight test. After this round, NASA will select student team/s for an all-expenses paid trip to a NASA field center in early summer, 2019. **Round 1 participation concludes with video submissions on May 1, 2019.**

You can also double up and combine your idea with https://humansinspaceart.org/ challenge.

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updated → **American Computer Science League** ACSL organizes computer science contests and computer programming contests for junior and senior high school students. In their 39th year of continuous operation, they are announcing an Elementary Division (grades 3-6). More information is available on their site.

ACSL

Over 200 teams in the United States, Canada, Europe, Africa and Asia are participating. ACSL is on the approved activities list of the National Association of Secondary School Principals (NASSP) and is an institutional member of CSTA.

Their yearlong contest is in 4 rounds. The last day to give and score **round 4 is Friday, April 19, 2019**. The All-Star Contest will be held on Saturday, May 25, 2019 at Wayne Hills HS, Wayne NJ. This is worth checking into even if to just have access to their wealth of short answer and programming problems over the years. <http://www.acsl.org>

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Reminder → [Robo Expo 2019.](#) The **Robo Expo** is an event for students of all ages, with a shared interest in robotics, to come together to pursue similar goals or express themselves uniquely. Participation in Robo Expo is open to schools, home school groups, clubs, and any children sponsored by an adult. Robo Expo exhibits are open to all robotics kits—NXT, EV3, VEX, Arduino, Wedo, Hummingbirds, and anything else. To learn more, read [Robo Expo – A Soft Approach to Robotics Teaching and Learning](#) This will be held at The Hewitt School, 48 E 75th Street, NY 10021 on Sunday, April 14, 2019 from 1:00pm - 3:15pm. [Find out more...](#)

Professional Development/Course Opportunities

New → [**Introduction to Computational Thinking for Every Educator**](#). ISTE is again offering this free online course developed with the support of Google. This course unpacks how CT can be integrated through all subject areas and grade levels. Here "Every" really means Every! This is a 15 hour self-paced course with ongoing instructor support. The upcoming March session is FULL, so you may now want to sign up for the **Summer Session which runs from June 3 - August 9**. Enrollment starts March 4, 2019. Apoply here: <https://www.iste.org/learn/iste-u/computational-thinking>

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Just launched → **Foundations of Computer Science for Teachers: Praxis Prep**. This course was just updated and relaunched by the University of Texas-Austin and is available to anyone in or out of Texas. The course explores and guides you through all 196 required competencies stipulated by the Praxis 5652 topic list. You will learn all you need to know to successfully take and pass this test.. This is an 8-week minimum self-paced online course. The cost is $398. Registration is open now - please go to <https://utakeit.stemcenter.utexas.edu/courses>.

Reminder → **University of Texas at Austin CS Education Courses.** UT Austin has developed several courses that may be of interest to you. All of their courses can be currently found at https://stemcenter.utexas.edu/online-education. Two highlighted here include:

Foundations of Computer Science for Teachers.
Strategies for Effective Inclusive CS Teaching.

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NEW → [**Raspberry Pi Foundation Free Courses**](#). Whatever age group you teach, the Raspberry Pi Foundation has something for you. For 2nd - 6th grade teachers, they have gentle introductions to programming like [Teaching Programming in Primary Schools](#). For teachers of 7th grade and above, they have useful courses like [Scratch to Python: Moving from Block- to Text-based Programming](#). Then, if you teach at a high school, they have more advanced courses that you can use to inspire and stretch students like [Object Oriented Programming in Python](#).

You can find these courses and many more (a total of 14 free courses) on the Raspberry Pi homepage on FutureLearn: [rpf.io/csatnews.](#) If you wish a completion certificate, there is a charge otherwise the courses are totally free.

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Professional Development/Conference Opportunities

reminder → **Inaugural Symposium on Computer Science and Learning Sciences.** This symposium's theme is "Conversations at the Intersection of Computer Science and Learning Sciences" and will be held at Northwestern University in Evanston, IL from Sunday April 28-Tuesday April 30. Advances in computer science offer enormous opportunities for expanding and deepening learning and education. Equally enormous are the challenges in meeting the needs for learning computational thinking and skills.This symposium will engage scientists in learning and computer science, senior and juniors, in a range of dialogues about the opportunities, challenges, and innovative solutions to education and learning for STEM and computer science. <https://www.cslssymposium.northwestern.edu>

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reminder → **WeTeach_CS Summit 2019.** 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 year's Summit will be held on the shores of the San Gabriel River at the Sheraton Austin Georgetown Hotel and Conference Center in Georgetown, TX, just outside of Austin. Approximately 300 CS champions will be in attendance. Registration opens February 1, 2019. Full details at: https://stemcenter.utexas.edu/events/18

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new → **Beauty and Joy of Computing Workshops.** PD applications are now open for the Beauty and Joy of Computing, an AP CS Principles curriculum (AP level high school).

BJC is an introductory computer science curriculum for high school or college students. BJC emphasizes the joy and complexity of creating visual computer programs and applications. BJC is balanced with critical reflection on the impacts of new computing technology. BJC is an AP Computer Science Principles course supported by the NSF and endorsed by the College Board and code.org.

Flyer here: https://bjc.berkeley.edu/documents/bjc-pd-2019-flyer.pdf
More info here: https://bjc.berkeley.edu/summer-pd/

The PD workshop costs $75, but covers all materials and on-going teacher support for the upcoming academic year. Additionally, we will be able to help with travel, lodging, and meal costs.

BJC offers PD workshops nationally. These week-long workshops are between the the weeks of June 24 through August 5, 2019. See the flyer for one of the dozen workshops available this summer. Applications to any of their national locations are due May 15, 2019.

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updated → **CSTA 2019 Annual Conference**. Get ready for this always excellent conference totally focused on K-12 computer science. The dates are July 7-10, 2019 in Phoenix, AZ. Plenty of workshops, sessions, opportunities to network and have fun together with colleagues from across the country who share

the same joys. Registration and more information is available at https://www.csteachers.org/page/2019conference
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NEW→ Free Week-long CS and Making PD Opportunity at Pathfinders Summer Institute

Infosys Foundation USA will host the **Pathfinders Summer Institute 2019**, an intensive week of in-person professional development in Computer Science and Making, at Indiana University Bloomington from July 14-19, 2019.
Over 700 US K-12 public school teachers will convene at **#InfyPathfinders** for high-quality hands-on training. All tuition, airfare, room and board for teacher participants will be paid. To make it possible for teachers to attend Pathfinders at no cost, funds from Infosys Foundation USA will need to be matched by schools, districts, PTAs or the donor community at DonorsChoose.org. Click **here** for detailed information on how the process works.
All K-12 public school teachers are invited to apply. Special consideration will be given to high-needs schools, teachers from under-represented communities, those new to teaching CS and Making, and districts demonstrating significant commitment to these subjects.
Last day for accepting teachers into a Pathfinders course is April 15, 2019.

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CS PD Week. Due to overwhelming demand, CSPDWeek will return to Colorado School of Mines, the week of July 22, 2019. CSPdWeek is a week-long residential professional development experience for computer science educators to support teachers and schools in offering inclusive and rigorous computer science learning opportunities. In addition to the National CSPdWeek in Colorado, many regions, states and communities are offering their own satellite CSPdWeeks as well. Full scholarships are offered to teachers and counselors who participate. <http://www.cspdweek.org>
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Logo Summer Institute - The 2019 Logo Summer Institute will be at the Spence School in New York City, July 22-25, 2019. The Logo Summer Institute is an intensive immersion in creative computing for K12 teachers, parents, and technology integrators. Our project-based approach supports computational thinking, and STEAM learning and teaching. The program is highly individualized to accommodate

novices as well as more experienced participants, teachers of different subjects, and those who work in after-school programs and other informal settings as well as in classrooms. Registration is open now. <http://www.logofoundation.org/summer>
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Scratch Day @ TC

December 7, 2019

9:00 AM – 1:00 PM

Teachers College, Columbia University, New York City

Hold the date and check back for further information.

We're looking forward to a fun-filled day of learning and creating for children, their parents, and teachers. Scratch Day is for people of all ages, experienced Scratchers as well as novices.

- Parents: bring your children
- Teachers: bring your students
- Children: bring your parents and teachers

There will be hands-on workshops, on a wide variety of Scratch topics and a chance to win raffle prizes.

To find out more and to see what went on at previous Scratch Days visit:

ww.logofoundation.org/scratchday

NEW → *Your Reading Assignments*

Project Based Learning: Start Here. From the Cult of Pedagogy. PBL allows us to teach CS within the framework of central questions, authentic problem-solving situations, inclusivity, relevance, etc. "Despite the popularity of project based learning, a lot of teachers haven't gotten around to trying it yet….One reason PBL might be hard for some teachers to start is that there's just so much stuff out there about it. Who has time to wade through it all? To solve this problem, I went out in search of the clearest, most authoritative information on PBL and put together a collection of materials that will help you get your feet wet, plus links to more resources for when you're ready to dig deeper."
<https://www.cultofpedagogy.com/project-based-learning/>

The Secret History of Women in Coding. This a very well written and extensive look at this topic. This begins with the story of Mary Allan Wilkes who wrote the software to support the Linc, one of the world's first interactive personal computers in the late 1960s. The article goes on to delve into the rise and fall of women in computer science. A very interesting and extensive article.
<https://www.nytimes.com/2019/02/13/magazine/women-coding-computer-programming.html?action=click&module=

Editors%20Picks&pgtype=Homepag>

… From the March, 2019 issue of this newsletter

Picking a Language for Introductory CS - Why I don't like Python. As the author, Mark Lewis notes in his lengthy but interesting blog post "The purpose of this blog post is to explore issues related to the selection of a first programming language for CS majors. I originally started it with the intention of raising questions related to the rapid adoption of Python that is currently happening in CS departments across the US. However, I decided to make it more general to "score" a variety of different languages. I will generally restrict my comments to languages in the top 15 on RedMonk that I know people have used for introductory programming courses or which I can easily imagine people using for that purpose". <https://dynamicsofprogramming.blogspot.com/2019/02/problems-with-python-for-introductory-cs.html

Student Voices: Why all kids need to learn computer science. The biggest reward of learning computer science for Issaquah student Hallie Chen was computational thinking, or breaking down problems into segments to solve one at a time. The benefits of computer science extend far beyond coding for any student, she argues. <https://www.seattletimes.com/education-lab/student-voices-why-all-kids-need-to-learn-computer-science/> (you'll need to sign up for the education lab series - it's free)

The Two Codes Your Kids Need to Know. The College Board came up with a surprising conclusion about keys to success for college and life. Take a look - I won't even tell you what they are and spoil your fun! The author is Thomas L. Friedman the author of the groundbreaking book "The World is Flat". <https://www.nytimes.com/2019/02/12/opinion/college-board-sat-ap.html>

… From the February, 2019 issue of this newsletter

How To Prepare Your Kids For a Post-Digital Age or Don't Teach your Kid to Code, Teach Them to Communicate. In 10 or 20 years, much of what we "know" about the world will no longer be true. The computers of the future will not be digital. Software code itself is disappearing, or at least becoming far less relevant. Many of what are considered good jobs today will be either automated or devalued. We need to rethink how we prepare our kids for the world to come.

Computational Thinking and Thinking About Computing. Computational thinking will influence everyone in every field of endeavour. This vision poses a new educational challenge for our society, especially for our children. In thinking about computing, we need to be attuned to the three drivers of our field: science, technology and society. Accelerating technological advances and monumental societal demands force us to revisit the most basic scientific questions of computing. Jeannette Wing, 2008. Worth revisiting for its depth and beauty <http://rsta.royalsocietypublishing.org/content/366/1881/3717.short>

Facial and emotional recognition; how one man is advancing artificial intelligence. In this CBS 60-Minutes production, Scott Pelley reports on the developments in artificial intelligence brought about by venture capitalist Kai-Fu Lee's investments and China's effort to dominate the AI field.

<https://www.cbsnews.com/news/60-minutes-ai-facial-and-emotional-recognition-how-one-man-is-advancing-artificial-intelligence/>

Monthly CSN Newsletter readings October 2012 - January 2019
<*http://istecsn.pbworks.com/w/page/125926169/Monthly-Newsletter-Readings*>

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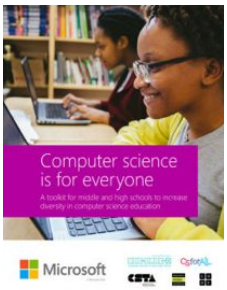
National Center for Women and IT (www.ncwit.org)

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:

Computer Science is For Everyone: A toolkit for middle and high schools to increase diversity in computer science education

www.ncwit.org/CSEveryone_Toolkit



Schools across the country and around the world are working to increase access to quality CS education. But while CS classes and opportunities are expanding, too many students — especially girls, Black, Latino and Native American youth — feel like it's not for them. As a result, the whole world misses out on the diverse perspectives needed to fuel innovation and drive change. The insights and tools in this kit will help ensure all young people understand the value of a CS education and feel welcomed and empowered to succeed.

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

CMU CS Academy. A novel, world-class, online, interactive high school computer science curriculum that is entirely free. Among other features is Brython, a Python-based editor and interpreter environment. Check it out! <https://academy.cs.cmu.edu>

UnrulySplats - These are programmable floor tiles that pair with a tablet preloaded with tons of recess-style play games. Kids first play the preloaded games then they change the code,

ultimately learning how to code on their own through active, recess-style play.
<https://www.unrulysplats.com>

Free Online Computer Science Courses. Openculture.com lists courses and other materials for computer science as well as many other disciplines. If you're looking for an extensive list of these types of resources, this is certainly one place to spend time.
<http://www.openculture.com/computer_science_free_courses>

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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>