CSforALL Announces Commitments from 294 Organizations to Expand

US Computer Science Education Movement

Opportunities created for 47 Million K-12 Students and 246,000 Teachers in the U.S.

Detroit, MI, Tuesday, October 9, 2018 - The movement to bring computer science to all US students (#CSforALL) marked a major growth milestone today, with nearly 300 organizations announcing new commitments and initiatives to bring computer science education to all US students, both in and out of school. These new commitments will yield learning opportunities for 47 million K-12 students and 246,000 teachers in the U.S. in the form of education programs, after school and summer programs, research efforts, learning aids, accessibility tools and more.

The announcements are being made as part of the second annual <u>CSforALL Summit</u> held at Wayne State University in Detroit. A sampling of the major announcements being made today include:

- 105 organizations signed the CSforALL Accessibility pledge and are committing to working to ensure that CS education tools, programs, research and initiatives are fully inclusive of students with disabilities, and accessibility is considered during the development phase for new efforts;
- Quicken Loans Community Fund, in partnership with the Detroit Public Schools Community District, is announcing investments in a district-wide blueprint for computer science education;
- **Siegel Family Endowment** (SFE) is unveiling a new ongoing partnership with CSforALL, in which SFE will provide a diverse suite of operating resources to support CSforALL's national agenda;
- National Math and Science Initiative, in partnership with Bootstrap, Exploring Computer Science, MIT App Inventor, Mobile CSP, NCWIT, Project GUTS, and UTeach Computer Science is launching an evidence-based K-12 computer science pathway for schools, leveraging over a decade curriculum research and development and millions in Federal investment;
- The **Digital Harbor Foundation** with support from **Schmidt Futures** is announcing the launch of the **Rec-to-Tech National Design Challenge** to build a scalable model that creates maker and computer science education programs to serve youth in community recreation centers around the country;
- 22 organizations are announcing commitments to serve students and educators in Detroit and across Michigan including Brave Initiatives, Lawrence Technological

University, Michigan State University, University of Michigan, West Shore ESD, and When Doves Code among others;

- Leveraging research on the influence of parents and families on student achievement in CS, STEM Next will launch The Family Engagement Project to elevate the critical role of families in supporting youth, particularly girls, to pursue and persist in STEM and CS; and today Chick Tech, Family Code Night, PBS Kids, the KISS Institute, DigiBridge, CodeCrew, Kodable and JP Morgan Chase are announcing family engagement initiatives;
- **13 Universities** from 10 states (CA, IN, MI, MN, NM, NJ, NY, OH, OR, RI) have committed to creating or expanding courses for educators in university programs. These courses will prepare teachers to instruct students in computer science.

A full list of the announcements being made is available below.

In addition to announcing commitments at the CSforALL Summit, 500 leaders gathered to celebrate the progress of the computer science for all movement nationally, and chart the path ahead. Notable speakers include:

- **Dr. Luis von Ahn,** founder of Duolingo and inventor of the reCAPTCHA, and recipient of the 2018 Lemelson-MIT Prize for invention;
- Actor and accessibility advocate **Daryl** '**Chill**' **Mitchell** who portrays computer specialist Patton Plame on NCIS New Orleans;
- Megan Smith, 3rd CTO of the US and CEO of shift7;
- Superintendent of the Detroit Public Schools and Community District Dr. Nikolai Vitti;
- **Dr. Marvin D. Carr**, Senior Advisor for STEM and Community Engagement to the Director at the Institute of Museum and Library Services (IMLS);
- Rhonda P. James, Senior Program Manager, Diversity & Inclusion, Intel
- Philanthropist **Penred Noyce**, founding chair of the STEM Next Opportunity Fund;
- **Richard Culatta**, CEO of the International Society for Technology in Education;
- Marlin Williams, Entrepreneur-in-residence, TechTown Detroit;
- Kumar Garg, Program Officer, Schmidt Futures;
- Provost Keith Whitfield of Wayne State University; and
- Gwynn Hughes, Program Officer, Charles Stewart Mott Foundation among others.

A livestream of the event will be available on Tuesday, October 9, 8:45 a.m. until 5:30 p.m. EST at: <u>http://live.csforall.org</u>

CSforALL is the national hub for the Computer Science for All movement that works to enable all students in grades K-12 to achieve computer science literacy as an integral part of their educational experience. CSforALL sets a collective agenda together with a membership of more than 500 content providers, education associations, nonprofits, researchers, and industry supporters to provide rigorous, inclusive and sustainable computer science education for all US students. Details are available at <u>www.csforall.org</u>.

The CSforALL Summit is the flagship community event for computer science education in the US. Learn more at **summit.csforall.org** and follow the story on **Twitter**, **Medium**, and **Facebook**.

2018 CSforALL Commitments

CREATING OPPORTUNITIES FOR YOUTH

Al4ALL will develop and launch a free, online AI education program focused on increasing access to AI education for 1,000,000 high school students in five years.

Apple will create a free AP Computer Science Principles course that integrates Swift and app development. Pending approval by the College Board, the course syllabus and materials will be shared during the 2018-2019 academic year.

Bit by Bit will host a She STEMS 2-week summer camp for 20 girls from 6th to 8th grade, that provides a hands-on introduction to robotics, and will organize ten workshops for 60 middle-school girls during the 2018-2019 school year.

Blocksmith Inc. will launch the 3.0 version of Blocksmith EDU platform, in which students can access curriculum resources, create games, and learn how to develop 3D scenarios, expecting 20,000 students users by 2019.

Boys & Girls Clubs of America will ensure that their 1,980,000 members have access to the Computer Science Pathway, a sequence of programs which help youth build skills in Computer Science, through the My.Future platform during the 2018-2019 academic year.

BrainPOP, in partnership with **Scratch** and **Vidcode**, will offer free access to their new Creative Coding feature to all CS educators from October to December 2018, allowing teachers to try out select projects for each of BrainPOP's subject areas, making it easy to integrate coding into their classrooms.

Brave Initiatives will expand their programs into five new cities in Michigan, Maryland, Florida, Indiana, and New Mexico (Native American Reservations) to provide coding and design thinking camps and workshops to more than 500 high school girls by 2020.

Breach will launch the Lift Off program in July 2019 in St. Louis, MO and Detroit, MI, in which 24 high school students will explore STEM-centered solutions for transportation, urban development, infrastructure and environmental challenges using innovative collaboration, creative storytelling, virtual reality and architectural design tools.

Carnegie Mellon University, as part of their commitment to CSforPGH, will expand their

undergraduate-led program, Expanding Teknowledge, to include a 10-week session of middle school programming workshops to existing afterschool programs in 10 schools during the 2018-2019 school year.

ChickTech, in partnership with **TechGirlz** and **Family Code Night**, will engage and train 30 high school youth in 6 communities to teach technology workshops to 200 K-8 students using TechGirlz and Family Code Night Curriculum during the 2018-2019 school year.

Code Explorers will implement CS programs reaching approximately 1,000 kids from 4 to 13 years old, by showcasing different aspects of CS and its applications - specifically in engineering, arts, and emerging technologies as VR, AR and IoT - by June 2019.

Code Longhorn will increase their offering of a one-week residential camp program, from once a summer to twice, and will serve 120 students from underrepresented populations, to immerse them into computer science by summer 2019.

Code{D}etroit will introduce 5,000 Detroit middle and high school students to coding by 2020, and provide additional long-term opportunities for students interested in further exploring computer science and STEM pathways as a possible career.

CodeCrew will offer a six-month Code School boot camp to train and develop at least 60 software programmers by 2020.

Codekey will set up a technology lab at the Durfee Innovation Society in Detroit to train 15 students and adults in software development and controls engineering skills by June 2019.

CodeMonkey will introduce a narration feature by October 2018 that reads out loud lines of code written by students in order to help those who are visually impaired, have not yet learned to read, have dyslexia, read slowly, or are learning English.

CodeSpark Academy will develop 10 new instructional resources for coding and special education implementation aimed at increasing access to CS education for K-8 students with disabilities by the end of 2018-2019 school year.

Coding in the Classroom will expand their seven-week computer programming workshop for 4th-6th grade classrooms by 60% in the 2018-2019 school year, and will serve approximately 100 students.

Common Code Math, in partnership with the Boys & Girls Club, will teach coding and computer science to 100 minority students from Moore County Schools in North Carolina, who are living in low socioeconomic areas, in the 2018-2019 academic year.

CS4RI is launching phase two of their initiative, and will hold a Summit in 2019 to engage 2,000

students as part of their continuous effort to ensure that all students have the opportunity to build 21st-century skills in computer science and computational thinking. Furthermore, they will utilize new metrics to gauge the health of CS education within the state.

CSforCA will ensure computer science education in California is equitable, scalable and sustainable for 6M students, build capacity of district leaders, create an implementation playbook and accompanying workshop for school leaders, and will double the number of districts committed to the goals of CSforCA by providing evidence-based research to inform the development of a statewide strategic plan by the 2018-2019 academic year.

Deaf Kids Code will extend the outreach efforts to teach computer science, technology, and design thinking skills to kids who are deaf or hard of hearing in at least 18 states by 2020, and connect 40 or more deaf educators with CS curriculum opportunities.

The **Digital Harbor Foundation**, with support from **Schmidt Futures** and in partnership with the **National Recreation and Park Association**, the **National League of Cities**, and the **Association of Science - Technology Centers** is announcing the launch of the Rec-to-Tech National Design Challenge to build a scalable model that creates maker and computer science education programs serving youth in rec centers around the country.

Emerging Entrepreneurs, Inc., with the support of **Wells Fargo** and **Dynamic Engineering Concepts (DEC)**, will sponsor 300 North Carolina students to enroll in a 2-year Virtual Reality Education Camp, called Tech Lab 2.0.

EDC and The University of Oregon will collaborate for a third year to provide sustained, online professional development to a third national cohort of 70 Exploring Computer Science (ECS) teachers as they embark on their first year of teaching the course.

EDC in collaboration with the Research Alliance for NYC Schools and University of FL will start a three-year research project to identify Effective Models for Integrating Computational Thinking into NYC Elementary Schools, and conduct case studies in five high-poverty elementary schools.

Factory Two will host a CSEdWeek event for participants in the July 2018 Django Girls Flint programming workshop to build peer relationships, encourage further CS exploration, and engage students in designing the 2019 workshop.

First Bytes Summer Camp is a free, one-week residential camp program for high school girls. It is designed to dispel myths about computer science and intrigue young women with the potential of computing and the excitement of problem-solving. In the summer of 2019, they will offer this camp twice in order to serve 120 of girls, whereas previously we only offered one per summer.

Games for Change will expand its Student Challenge, a national game design competition that

builds 21st-century skills, by inviting 600 Detroit students to make digital games about local civic issues during the 2018-2019 school year. They will also grow the cohort of educators by providing professional development in game-based learning to 20 new teachers. **Garnet Valley Middle School** will provide computer science courses and experiences to over 600 6th to 8th grade students during the 2018-2019 school year.

Girl Scouts of the USA will launch nine new Cybersecurity badges for middle and high school girls and 18 new Coding for Good badges for K-12 girls by July 2019, and host a Cyber Challenge event to serve an estimated 2,500 middle and high-school girls with ten Girl Scout councils by October 2019. Additionally, they will explore creating STEM centers across the country, using the STEM Center of Excellence from northeast Texas as a model.

Girls Make Apps will partner with school counselors to provide technology development workshops for 500 middle school girls through the 2018-2019 academic year.

Girls Who Code at the University of Michigan DCMB, will provide CS educational opportunities to 30 high school students in the greater Ann Arbor area through a weekly Club during the 2018-2019 academic year and a summer camp in 2019. They will extend their reach by partnering with organizations within the University to lead K-12 instructional activities and making educational content available to the public.

Girls Who Code will expand their programs for 3rd-5th and 6th-12th grade girls to reach more than 100,000 girls across the country by 2019, who will join a sisterhood of supportive peers and role models and build the pipeline of future female coders.

Governor Mifflin Middle School will teach Code.orgs Computer Science Discovers to 600 7th and 8th grade students during the 2018-2019 school year.

Important Little Games will release Codemancer, a new game that teaches the basics of programming to 10,000 kids aged 6 to 12 by fall 2018.

INTech Camp for Girls will deliver a year-long program leading to summer internships for 100 high school girls in the state of North Carolina by the end of 2019.

Intel Corporation, in partnership with AISES, will develop a new computer science and technical education curriculum for 50 students enrolled in Intel's Native American Coders Program to prepare them for computer science degrees and careers through independent projects, mentorship, and technical education by integrating culturally-relevant content infusing Navajo culture for 2018–2019 school year.

Journi will provide paid and real work experience to 20 students, who will receive 64 hours of training in web and mobile app development, and later compete to join Journi's development shop for a paid role alongside experienced developers by July 10, 2019.

JPMorgan Chase will bring cyber safety education enrichment to nearly 10,000 children from 3rd to 8th grade, and to 1,500 parents, through their Cyberkidz program by 2018. Additionally, they will serve over 600 high school students through Generation Tech, a one-day technology design challenge focused on prototyping technical solutions for a social good cause.

JPMorgan Chase will engage 20 Black and Hispanic young men in an All Star code Summer Intensive, where they will learn hard technical skills along with soft skills through mentorship and guest speaking engagements with employees by Summer 2019.

Kennesaw State University, in collaboration with the **Cobb County School District**, will provide their Game Design Boot Camp and Game Jam Junio programs to 90 girls from elementary schools. These programs are designed to broaden interest and perceptions of computer science and STEM by 2020.

Kiss Institute for Practical Robotics will provide after-school mother and daughter coding nights to 360 participants at local libraries in Oklahoma, California, and Tennessee during the 2018-2019 academic year.

Kodable will create accessible online activities for kids to learn coding outside of school, and build tools for parents to engage in and support their child's learning year round, by January 2019.

Lawrence Technological University, in collaboration with **Robofest**, will provide computer science and autonomous robotics summer camps for 100 underrepresented students in grades 6-12 from the Detroit area in summer 2019; and, through their Robofest competitions, will expand their computer science focused robotics programs to reach at least 2,000 students from 4th to 12th grade in 15 states, during the 2018-2019 school year.

Learning Blade®, in collaboration with **Boy Scouts of America**, will create new materials to incorporate Code.org activities into Scouting programs by December 2018, providing access to 2M youth annually.

Learning.com will provide free access to their EasyCode basic lessons during their annual Code-a-Thon to more than 1,000,000 students over the next five years. They will also deliver building-wide, one-year licenses to Learning.com's digital literacy and coding curriculum to 2 schools, and will provide one-year licenses to Learning.com's digital literacy curriculum for up to 30 students each in four additional classrooms.

Manheim Township School District will open a Girls Who Code club in an effort to serve 30 girls from 7th to 12th grade by 2019.

Michigan State University College of Engineering and **Capital Area District Libraries** will launch Technovation, an undergraduate student-led program, that will provide CS education to 28 students in grades 6-12, with priority given to Lansing residents in underserved communities during the 2018-2019 academic year.

Michigan State University College of Engineering will research how to scale a flipped classroom model to train STEM majors in computational modeling. By fall 2018, they will be experimenting with a class of 70 students with one Ph.D. level instruction, one graduate teaching assistant, and multiple Learning Assistants.

Mimir, in collaboration with three Universities from Michigan, will develop and pilot eight units of free CS course materials to improve adoption of free digital textbooks and reduce costs for 1,200 students by May 2019.

The National Center for Women in Information Technology (NCWIT) will establish at least three strategic partnerships to increase the percentage of Aspirations in Computing award applicants from underrepresented communities (specifically Black, Latino, and Native American young women) by December 2019.

NSA Research Directorate, in partnership with **Vanderbilt University**, will make the Netsblox robot software freely available, including curriculum descriptions for the 2018-2019 academic year. Additionally, they will provide six teacher professional development workshops and one basic and one advanced Cyber Physical System (CPS) robotics camps to 7th to 12th grade students and teachers by 2019.

Parkland School District is committed to promoting computer science and computational thinking for all students, and will bridge the digital equity gap by providing devices and home wi-fi to all 9,400 students by fall 2019.

Partner4Work, as part of their commitment to **CSforPGH**, will provide computer science skills training for 100 young adults that dropped out of school or are at risk of dropping out by December 2019.

Programming Pals aims to provide virtual Computer Science tutoring and adaptive learning experiences for up to 200 students with disabilities through 2019.

Project Lead The Way (PLTW) will expand their elementary program, PLTW Launch, during the 2018-2019 school year. This expansion will provide access to 5,100 Pre-K students during the 2018-2019 school year, and will facilitate earlier introduction and encouraging later interest in CS.

Project Lead The Way will introduce relevant cybersecurity skills securely and responsibly to over 4,050 students and 116 schools across the country in 2018-2019 school year through their Cybersecurity course.

Simcoach will reach 10,000 downloads of games that expose the next generation of talent to career paths and connect them to training, apprenticeships and employment, in partnership with the CSforPGH network and educational organizations, workforce development agencies, in school and out of school programs and industry by May 2019.

TECH CORPS will expand and deliver the Techie Camp program to serve 1,300 under-served middle school students at no cost in California, Colorado, Georgia, New Jersey, Ohio and Rhode Island during the summer of 2019.

Techbridge Girls will introduce CS to 600 girls from low-income communities through high-quality, equitable after school programs in the Greater Seattle, Washington D.C., and San Francisco Bay areas during the 2018-2019 school year.

TechGirlz will expand their TechShopz in a Box program, a free and open source workshop curriculum, to reach 10,000 girls by the 2019-2020 school year.

TechKidsUnlimited.org, in partnership with **NYU Tandon School of Engineering** and other community organizations, will provide game design, website, and app development workshops for 300 NYC students ages 7 to 21 with neuro-developmental disabilities by 2019.

The Chicago Alliance for Equity in CS Education (CAFÉCS), in collaboration with Exploring Computer Science (ECS) and the Education Development Center (EDC), will develop a hybrid instructional model and curriculum for ECS to reach 1,450 Chicago Public Schools students annually who are in schools for incarcerated youth or who are in need of summer credit recovery by fall 2019.

The City of Chicago's Department of Family and Support Services' One Summer Chicago' Youth Employment Program will leverage the support and involvement of the Everyone Can Code initiative to engage an additional 200 youth in learning Swift app development, and will place 50 youth that successfully completed the Swift App development in 2017 and 2018 in paid technology internships in 2019.

The Constellations Center for Equity in Computing will teach the AP CS Principles course to 200 high school students in 7 public high schools within low income communities in Atlanta during the 2018-19 academic year.

The KISS Institute for Practical Robotics will expand the Junior Botball Challenge program, which supports and empowers elementary and middle school educators to teach their classroom students CT, to 12 rural schools in Oklahoma, 6 in Oklahoma City, 15 in Houston,

and 6 in San Jose, to reach 1,500 students during the 2018-2019 school year. They will also expand their services to 8 Native American Communities during the 2018-2019 school year.

The Knowledge House (TKH), in collaboration with **Infosys Foundation USA** and **Tech Kids Unlimited**, will launch "Expanding Access to CS and Maker Curricula to Bronx Youth" to make Exploratory Technology programs more inclusive, and serve 150 youth in the Bronx with special needs during the 2018-2019 school year.

The Nevada Department of Education will work with school districts to increase the enrollment of female, black, Hispanic, and disabled students in computer science courses by 10% during the 2018-2019 academic year

The Office of Computer Science at Chicago Public Schools (CPS), in collaboration with the Office of Diverse Learner Supports and Services (ODLSS), will identify key learning objectives and develop a modified CS curriculum that will benefit approximately 800 high school students with severe and profound learning disabilities in each graduating cohort. Also, 165 teachers will receive access to these supplements to the ECS curriculum during the 2018-2019 academic year.

The Pittsburgh SuperComputing Center's ProjectGcode program will introduce basic programming concepts to help 60 girls from 6th to 12th grade build awareness of 21st-century careers in technology and cyberscience during the 2018-2019 school year.

The Scratch Foundation will support the launch of Scratch 3.0, expanding how kids can create and share, and how educators can support student learning with the creative coding environment, expanding our reach by adding more than ten million new community members in 2019.

The United States Patent and Trademark Office (USPTO) will explore adding new inventor trading cards featuring inventors in computing fields. The USPTO has identified 3-5 inventors who have a background in computer science, have made a substantial contribution to technology, a patent portfolio, and are minority and/or women. Upon approval, the inventors' cards will be released to the public and offered at public events for all.

The University of Texas at Austin will expand CodeOrange, their 1-on-1 mentoring program, to 100 students from underserved communities in Austin during the Fall 2018 semester.

University of Texas will offer several events through their CS Roadshow program for elementary, middle, and high school students to introduce the different fields within computer science using code.org, current members' personal projects, and other materials, serving 100 students in the fall of 2018, an increase of 30 percent.

Uplift Inc. will create Game Workz, a competitive video game tournament where 1,000 students, ages 16 to 24, will learn a top computer language in preparation for competition by January 2020. The best students will receive classes at Uplift's Cisco Networking Academy and secure an industry certification.

The University of Texas Computer Science Robotics camp will offer a one-week residential camp program for 120 high school students from 9th to 12th grades, to immerse them in robotics and computer science during Summer 2019.

The University of Texas Computer Science students, faculty and alumni will introduce and encourage programming in elementary, middle, and high schools to 2,500 students in the Austin area, during CS Education week 2018.

Visionary Machines LLC, in collaboration with the Carnegie Mellon University School of Computer Science and the New Brighton Area School District, will offer programming instruction and AI education using the Calypso software framework and the Cozmo robot, to all 3rd-5th grade classes at New Brighton Elementary School, reaching approximately 330 students throughout the 2018-2019 school year.

Wayne State University (WSU), as part of a campus-wide commitment to computer science education for all students, will award college credit to students who pass the AP Computer Science Principles Exam with a 4 or better beginning in SY 2018-2019; WSU Computing and IT will host four high school interns summer 2019 as part of Growing Detroit's Young Talent, and offer IT internships to ten WSU students to further their understanding of Computer Science, Infrastructure and Organizational Integration; and WSU DHacks will offer weekly workshops focusing on AI, User Experience, Web Development for Detroit students age 11 and up through 2019

GROW THE MOVEMENT

BootUp PD will introduce computer science into 6 Ogden School District elementary schools during the 2018-2019 school year serving 2,870 K-5 students.

BootUp PD will partner with **Utah's Alpine School District** and **Davis School District** to introduce computer science to 80,000 K-5 students by 2020.

Citizen Schools and its US2020 City Network of 22 communities, with support from **Dell**, will expand access to hands-on CS and maker education, reaching 60,000 students by the end of 2019. Students will engage in real-world computational thinking and explore careers in CS

through the WOW! Apprenticeship and Catalyst programs and Coding Academy. In Detroit, a US2020 City Network Member, the Michigan Science Center will engage 10,000 students, including through the STEMinista Project for girls in 4th-8th grades. Additionally, with the support of Google, Amazon, and Capital One, Citizen Schools' Coding Academy will double the number of students served in New York by the 2018-2019 academic year.

College Board will increase the number of new schools offering AP Computer Science Principles through new and existing partnerships, additional outreach, and the AP Mentoring program by 30% by 2019. Additionally, they will provide outreach to schools traditionally underserved in computer science by recruiting 400 new majority-minority schools and 350 new rural schools by 2019.

CS4IL will convene a statewide CS education summit in the 2018-2019 school year to grow the CS education stakeholder community across Illinois and broaden engagement to include all geographic regions of the state.

Microsoft is renewing its work with **Boys & Girls Clubs of America** and **Girls Who Code** and making a new investment in **Black Girls Code**. Through these investments, more than 5,300 teachers and trainers will receive training and support to teach computer science, and more than 165,000 young people will participate in computer science education in the next year, with a special focus on populations and locations in the US that have historically been underrepresented in computer science. This commitment is a part of the longstanding work of Microsoft and its partners to create opportunities for all young people to participate in computer science education.

PBS KIDS, in partnership with the **Corporation for Public Broadcasting** and up to 30 public media stations across the nation, will engage more than 4,000 children, families and educators from underserved communities in CS activities through the PBS KIDS Family & Community Learning workshops, utilizing the PBS KIDS ScratchJr app.

Pennsylvania Department of Education, in collaboration with **Delaware County and Allegheny Intermediate Units**, will develop a voluntary K-12 Computer Science Curriculum Framework and curate open source aligned resources aligned to the K-12 2017 CSTA standards 2; provide training for at least 800 educators in Code.org professional learning series; hire four full-time consultants to provide computer science professional development to 250 elementary, middle and high school teachers by 2018-2019 academic year; support several PD opportunities for PA educators with \$20M and host the second CSforALLPA Conference for 500 educators by June 2019.

Remake Learning, in partnership with key stakeholders across the region, will develop the CSforPGH initiative to mobilize and grow the community of CS education stakeholders and supports in the region; identify, create and disseminate no and low-cost CS education

resources, including a regional guide for Pittsburgh educators and administrators; and build partnerships to support on-ramps for girls and students of color serving a community of 100,000 students by December 2019.

Siegel Family Endowment will broaden investments in the national computer science education movement by providing an institutional home for CSforALL operations and staff, enabling CSforALL to support the mutual goal of access to high quality computer science and computational thinking education to all learners across the country.

The Expanding Computing Education Pathways (ECEP) Alliance will invite 6 new states to join its current 17-state computing education network and support each state, in collaboration with K-12, higher education, industry, and research communities, to develop strategies that foster statewide equitable computer science education for underrepresented populations.

The Institute for School Partnership at Washington University in St. Louis will develop CS lesson extensions for each grade level within their NGSS-aligned K-8 science curriculum, mySci, reaching 250 schools, 2,500 teachers, and 100,000 students during the 2018-2019 academic year.

TechBirmingham and **TEALS Birmingham** will convene more than 20 government agencies, companies, and individuals from the seven-county metropolitan area, representing approximately 1.2 million residents, in a regional roundtable designed to better align goals and local resources and to increase the collective impact of efforts to promote access to STEM disciplines and computer science in October 2018.

The Rochester Institute of Technology, will explore the development of a partnership with the **Rochester City School District**, to create a CS4All program with the goal of providing equitable and sustainable access to high-quality teaching and learning opportunities in computer science education. This program has the potential to impact 32,000 Rochester students and prepare them for college, careers, and community engagement.

The University of Hawaii, in collaboration with the **Hawaii Department of Education**, will host the CSforHI Summit in Hawaii by 2020 as part of the implementation of the CSforALL program in their 129 schools in the state, serving 179,000 students by 2021.

INCREASING RIGOR AND EQUITY

105 organizations signed the CSforALL Accessibility pledge and will work collaboratively to ensure that their CS education tools, programs, research and initiatives are fully inclusive of students with disabilities, and accessibility is considered during the development phase for new efforts.

AccessCSforAll will provide professional development for teaching an accessible version of Computer Science Principles to at least 45 teachers who have expertise in teaching students who are blind, deaf, or learning disabled by December 2019.

Afterschool Alliance will promote computer science in out-of-school time, through their website and the Afterschool STEM Hub, by creating and updating new and existing CS-focused afterschool program profiles, highlighting afterschool CS programs during CSEdWeek 2018, and updating the Afterschool STEM Hub's CS position paper to include an emphasis on inclusion and access for students with disabilities in CS programs.

American Institutes for Research will increase its cohort of CS for All Teachers community ambassadors from six to ten in 2018, adding a new cohort of ten ambassadors each subsequent year through 2020. Through monthly webinars and guided support, the ambassadors will deepen their learning, enhance their skills, and expand their leadership within and beyond the CS for All Teachers virtual community of practice.

American Institutes for Research, as part of its CS for All Teachers initiative, will pilot a research collaborative with five program providers who support CS teachers virtually. This collaborative will co-develop a research agenda and study common benefits and challenges of online professional development over the course of a three-year period from 2018 to 2021.

Anki Robotics, in partnership with the **Carnegie Science Center**, will develop a grade 3-5 curriculum for Cozmo, a programmable AI robot, and the Code Lab platform to provide playful pathways for kids to creatively engage with robotics, CS, and STEM education, aiming to reach 100,000 students by the 2019-2020 school year.

Apple will create a free AP Computer Science Principles course that integrates Swift and app development. Pending approval by the College Board, the course syllabus and materials will be shared during the 2018-2019 academic year.

Bebras USA, a Challenge on Informatics and Computational Thinking will expand the Bebras Challenge to 50 regional rounds across the USA, reaching over 150,000 students and 1,500 teachers by 2018-2019, while keeping the challenge free for teachers and students all year round.

Bootstrap will make their entire software suite fully-accessible to students who rely on access technology and to further develop their editing environment to be both accessible and usable as a pedagogical tool for 1,000 visually-impaired students in the 2018-2019 academic year.

BootUp PD will create an additional 30 interest-driven coding projects and teacher lesson plans by 2019, bringing their free elementary CS resource library to a total of 100 projects.

Carnegie Learning will pilot a program to offer 20 free licenses of their K-12 project-based Computer Science curriculum, Proto, to teachers in schools that primarily serve underrepresented and low-income students through December 2019. **Chester County Intermediate Unit** will offer CS professional development to 300 educators, with the goal of providing computer science education to approximately 4,500 K-12 students by the by Summer 2019.

Cleveland State University will develop a complete academic program that will prepare 20 teachers to obtain a Computer Science Endorsement credential in the State of Ohio by May 2020.

CodeCrew will pilot a new CS course that engages parents and families as active participants in the student experience by leveraging computing to address a family dilemma or challenge, reaching 120 families over the next three years.

CodeHS will build out new curriculum units to let students explore computer science across subjects, including coding and music, art, sports, math, and physics, and host professional development sessions around the country for 100 teachers, and assist teachers receive continuing education credit for CodeHS PD courses by summer 2019.

Codesters will support for 500 teachers in implementing a new curriculum that includes subject-aligned projects in core subject areas of Math, Science, ELA, and Social Studies in by 2018-2019 academic year.

CodeVA will launch the Middle School CS Coaches Academy, assisting Virginia districts in complying with the state's mandatory integrated CS standards. The program aims to train at least one coach per Virginia middle school over the next three years, with a first-year goal of 180 coaches impacting 124,000 students by the 2019-2020 school year.

Computer Science for Rhode Island (CS4RI), will partner with the state higher education institutions, **University of Rhode Island** and **Rhode Island College,** to offer computer science education training and credentialing to 10 teachers in year one and two and thirty pre-service and in-service teachers afterward by 2022.

Cornell Tech will create 12 open source units for ELA, math, science and social studies to be used by middle school teachers, to integrate CS into core subjects using Raspberry PI by 2020.

Cornell Tech will increase the number of young women in high school who participate in programming competitions by holding a all-female high school programming competition in the fall 2018, mentored by college students involved in their Women in Tech and Entrepreneurship in NY (WiTNY) initiative.

Cornell Tech, in partnership with the **CSTA NYC chapter**, will help to build community and provide professional development for 200 PK-12 teachers, supporting the development of both content knowledge and pedagogy for those who are teaching stand-alone CS classes, and

those who are working to integrate CS into core subjects or general education in NYC public schools by July 2019.

CSTA and **ISTE** will collaborate to create CS Educator Standards that will establish clear guidelines on what computer science educators should know and be able to do by Fall 2019. These standards will provide a community of more than 33,000 teachers with aspirational goals to guide their professional learning, and benchmarks for professional development providers as they craft computer science PD experiences.

Educate Maine and **Maine Mathematics and Science Alliance (MMSA)** will provide professional development and ongoing support to 90 new K-8 Maine teachers to implement computer science in their classrooms and schools by 2019.

Girls Who Code will launch at least five Women in Tech Lesson Plans to expand their in-school content, promoting diverse female role models in tech to 1,500 middle school classrooms across the country by 2019.

Hunter College will offer monthly professional development sessions beyond the introductory CS content and pedagogy, awarding CTLE credit, to 20 NYC teachers during 2018-2019 school year.

Idaho STEM Action Center will partner with national and statewide industry leaders, to provide and expand two new and ten existing high-quality CS professional development opportunities to support 2,600 educators by June 2019.

Indiana University's School of Education will engage 400 pre-service teachers in teaching CT/CS to local K-12 students through a local field experience by April 2019.

JPMorgan Chase (JPMC) will engage 100 young women in 5 cities in a Girls Who Code Summer Immersion Program that teaches CS through project-based learning and connects girls to leading female engineer role models by summer 2019. In addition, JPMC will become the Mid-Atlantic Sponsor to Girls Who Code Clubs, serving girls ages 11-18 in Delaware, DC, Maryland, New Jersey, Pennsylvania, and Virginia during the 2018-2019 academic year.

Lancaster Lebanon Intermediate Unit 13 will host Code.org and Everyone Can Code workshops, providing professional development and instructional coaching in computational thinking to 80 educators during the 2018-2019 academic year.

Luzerne County Intermediate Unit will provide practical STEM/CS professional development to 30 educators to ensure that they are connected with the CS workforce, and also, to build an authentic in-class application of computer science for 600 students during the 2018-2019 academic year.

Maryland Codes will grow a vibrant community of professional learning with all 24 Maryland

districts engaged in collaboratively supporting the vision of fully implemented Maryland P-12 CS Standards.

MENTOR will disseminate the STEM Mentoring Supplement of the Elements of Effective Practice for Mentoring publication with more than 1,000 people, both during the National Mentoring Summit as well as digitally thereafter, and train the staff at their 25 national affiliates on the best practices and practitioner informed recommendations in the supplement by the end of 2019.

Michigan State University College of Engineering will work with the Jupyter Open Source development community to make Jupyter user interfaces accessible for students with disabilities, and directly engage the Jupyter software development community to raise awareness around accessibility will the aim of prioritizing accessibility in future Jupyter development by 2018-2019 academic year.

Mobile Computer Science Principles (Mobile CSP), in partnership with **Capital Community College** and **Southwest Minnesota State University,** will create and study a concurrent enrollment version of the CS Principles course for students in Minnesota and Connecticut, preparing 40 teachers in summer 2019 and 2020.

National Girls Collaborative Project (NGCP), in partnership with **AccessComputing,** will bolster the content and navigability of accessible CS programming to the Connectory, a portal to search STEM offerings and learning opportunities, by October 2020.

NCWIT, in partnership with **CSTA**, will develop research-backed practices to create more inclusive learning environments, and disseminate these practices to the 20,000 members of the national CSTA network.

New Mexico State University will provide Computational Thinking (CT) and Computer Science (CS) professional development opportunities to 50 teachers from non-STEM disciplines by July 2020, to bring these new learnings into their classrooms and increase the number of students exposed to CT and CS.

Northeast Ohio STEM Ecosystem (NEOSTEM), in collaboration with **CSforCLE**, will connect with higher education institutions to connect university CS faculty, CS undergraduate, and graduate students with local K-12 CS initiatives in an effort to diversify faculty engagement and build learning communities dedicated to increasing access to CS education throughout the 2018-2019 academic year.

Northeast Washington ESD (NEWESD) will provide SCRIPT training for 9 Education Service Districts in the state of Washington facilitating implementation of CS education programs serving 200,000 students by June 2019.

Parallax Inc will provide training to 500 educators through in-person workshops and online resources, focusing on hands-on learning of robotics, electronics and programming during the 2018-2019 academic year.

Project GUTS, with the support of the **National Science Foundation**, will offer a year-long intensive professional development program, Teachers with GUTS, for 30 middle school science teachers preparing them to integrate CS into their regular science class reaching up to 3,000 students by May 2019.

Project Lead The Way will introduce a new assessment to measure computer science knowledge and in-demand skills that are highly sought-after among employers and colleges to 58,000 high school students across the US by the 2018-2019 academic year.

Qualified, in partnership with the **Pennsylvania Department of Education**, will provide free licenses of the Qualified platform to 5 school districts within the state during the 2018-2019 school year. The Qualified platform allows educators to design and implement coding assessments for student testing to reinforce and improve CS principles and actual coding skills.

SageFox Consulting Group, in partnership with **CSforALL Consortium** and **National Science Foundation (NSF)**, will bring a second cohort of NSF-funded CSforALL Research-Practice Partnership projects into their community of funded partnerships (RPPforCS) to collectively develop a shared research agenda to facilitate the understanding of the efficacy of the RPP model for affecting CS/CT education.

Sphero will design 70 new cross-curricular CS lessons aligned to ELA, Math, Science and Social Studies standards, enabling 40,000 teachers to expose students to CS principles while working through the everyday curriculum by summer 2019, and increase its computer science professional learning opportunities with onsite support, virtual training and self-service learning by bundling services with their products to ensure that 20,000 educators are supported in teaching and promoting computer science by December 2018.

SRI will disseminate the research findings that are emerging from twelve CS education assessment and evaluation projects, to better equip practitioners with evidence based approaches to teaching and learning CS by early 2020.

STEM Next will launch The Family Engagement Project which will elevate the critical role of families in supporting youth, particularly girls, to pursue and persist in STEM and CS; work directly with youth development organizations to build their capacity to include effective family engagement strategies; work with researchers and practitioners to design a family engagement in STEM framework tool to guide more effective family engagement in STEM and CS strategies by 2019

Teach For America, in partnership with Exploring Computer Science (ECS), will recruit and

prepare 44 teachers from populations historically underrepresented in computing to teach the ECS curriculum across its partner schools and regions, expanding access to rigorous CS courses for upwards of 2,000 students by August 2020.

The ACM Special Interest Group on Computer Science Education (SIGCSE) will provide 50 travel grants to their 2019 Technical Symposium for first-time attendees and K-12 educators and will provide discount registrations for all of their conferences for K-12 educators.

The Allegheny Intermediate Unit 3 (AIU) will support local districts in Computer Science implementation through TransformED by hosting 80 to 100 free workshops to support educators in implementing rigorous STEAM and CS instruction, convening a quarterly "STEAM Role-Alike", including a role-alike for Computer Science Teachers, and supporting curriculum integration of CS for 42 public districts by the 2018-2019 school year.

The Arkansas Department of Education (ADE) Office of Computer Science will continue with their program to reimburse the one-time PRAXIS fee for Arkansas educators who pass the Praxis Computer Science (5652) assessment, and add the 528 Computer Science Endorsement to their Arkansas Educator's License. Additionally, will cover the licensure application and renewal costs for all 33,000 Arkansas educators that are adding or already have a 528 Computer Science Endorsement on their Arkansas Educator's License by 2018-2019 academic year.

The Beauty and Joy of Computing (BJC) team, with support from the National Science Foundation, will continue curriculum revisions, teacher training and support for over 200 teachers, and dissemination of research results including impacts on students' engagement, attitudes, and content knowledge and of BJC PD and curriculum use on teachers' content knowledge, pedagogy, and attitudes.

The Center for Cyber Education (CCE) at Mississippi State University (MSU), in partnership with the **Mississippi Department of Education**, will provide professional development in Code.org CS Fundamentals, Code.org Computer Science Discoveries, Exploring Computer Science and AP Computer Science Principles to 100 teachers each summer over the next 5 years.

The Center for STEM Education of UT Austin and the **WeTeach_CS project** will support 75 TX educators in achieving high school CS teacher certification, and expand the online Foundations of CS for Teachers course to support all US states adopting the CS Praxis exam by Summer 2019.

The College of Education at Michigan State University will launch a graduate certificate in K-12 Computer Science Education by the Fall of 2018 to prepare teachers to teach computational thinking and computer science in K-12 classrooms.

The College of St. Scholastica will launch the new National Center for Computer Science

Education focused on researching and providing equitable computer science learning experiences for 1,200 K-16 educators and 40,000 students by 2022.

The CS for Oregon project, a joint effort between **Portland State University** and the **University of Oregon**, will provide professional development for 100 in-service and pre-service teachers, addressing problems of practice, and sustaining the growth of the Exploring Computer Science course in 22 high schools throughout Oregon during the 2018-2019 school year.

The Department of Computer Science at The College of New Jersey is developing courses, by the end of the fall 2018 semester, to prepare pre-service and in-service teachers for the new NJ state laws designed to bring CS into the K-12 system.

The Friday Institute will expand their Massive Open Online Courses for Educators (MOOC-Eds) to include three new courses that focus on AP Computer Science Principles teaching, middle school CS teaching, and integrating CS and CT into other subject areas reaching 1,500 educators throughout the US and around the world in 2018-2019.

The Museum of Science, Boston with the support of **Dell** and other organizations, will add elementary and middle school CS units to their CS curriculum, following the design principles of the Engineering is Elementary (R) program. The elementary curriculum will pilot in 2019 in preparation for national release in 2020, while the middle school curriculum follows the next year.

The Raspberry Pi Foundation will launch ten free online courses for educators who seek to blend project-based learning with computer science. Additionally, they will offer expanded support and content for the Code Club after school program and CoderDojo community program doubling the number of youth reached through those programs across the country by 2019.

The Robot Garage will partner with DPSCD, FIRST in Michigan, and Quicken Loans to offer 1-day coding and robotics boot camps to all mentors and teachers leading FLL & FTC rookie robotics teams for DPSCD, expecting up to 150 participants between October of 2018 and October of 2019.

The STEM Next Opportunity Fund, in partnership with the **Charles Stewart Mott Foundation**, will help 32 State Afterschool Networks expand access to high-quality STEM and CS programming.

The UCSD Center for Research on Educational Equity, Assessment & Training Excellence (CREATE) will offer four fully online courses for in-service CS teacher preparation serving 200 teachers, provide Bootstrap training for 50 San Diego area teachers, and engage 25 counselors in NCWIT's Counselors for Computing training in October 2019. Finally, they will offer two pre-service CS Teacher preparation courses to 300 students from both UC San Diego students and the University of California.

The University of Oregon will provide 4 years of continuous support to 40 Exploring Computer

Science (ECS) facilitators through annual convenings, online meetings, and other supporting opportunities, beginning in the 2018-2019 school year.

The University of California Irvine, in partnership with the Orange County Department of Education (OCDE) and Santa Ana Unified School District (SAUSD), will form a collaborative network of researchers and practitioners to promote Computational Thinking for 200 students from 3rd to 5th grade by June 2019.

The University of Nebraska Omaha will distribute their Computational Thinking Bins to at least six Educational Service Units (ESUs) throughout Nebraska, so approximately 100 teachers could have access to them by November 2018 during CS Education week.

The Virtual High School (VHS) will develop and launch a 15-week online cybersecurity course for delivery in the 2019-2020 academic year. The course will be available to over 600 schools and 4-week companion module on cybersecurity will be available for use by schools and out-of-school time programs by July 2019.

Twin Cities PBS will provide professional development for 500 K-12 formal and informal educators in Minnesota by Fall 2020.

UTeach CS will develop a research-based PBL AP CS A (Java) course designed to increase interest and engagement for all students, especially for girls and underrepresented minorities, and to prepare students for potential STEM careers and college majors.

UTeach will collaborate with the **UChicago STEM Center** and **AccessCSforAll** to incorporate Universal Learning Design recommendations into the UTeach CS Principles 2019 course, improving accessibility for students with cognitive and learning disabilities.

UTeach will expand the reach of the project-based UTeach CS Principles curriculum by providing professional development for 200 teachers in the spring and summer of 2019, through both online and in-person courses.

Washington MESA, in collaboration with **Amazon**, will provide professional development to 130 educators that teach in underserved communities in Washington State by 2018.

West Shore ESD will support 200 middle school and high school teachers, through the state of Michigan, in the implementation of the CS Discoveries Course and AP Computer Science Principles course in their classroom during the 2018-2019 school year.

Wonder Workshop will launch Tech Wonder, an online instructional platform that instructs educators on how to teach computer science, with a goal of reaching 20,000 educators by 2019.

SUPPORTING LOCAL CHANGE

CodeCrew will provide professional development to 15 teachers to prepare them for the CS Praxis exam by November 17, 2018.

BootUp PD, will partner with the Ogden School District, Juab School District, Alpine School District, Cache County School District, and MOC-Floyd Valley Community School District in 2018-2019 to implement CSforALL initiatives serving 52,657 students.

BootUP PD, in partnership with **Yelm Community Schools**, will provide practical computer science instruction to all 3,111 K-5 students weekly, while classroom teachers embed content into core instruction, and provide Train-the-Trainer support to school representatives to sustain the initiative over time.

Carnegie Library of Pittsburgh (CLP) will provide a five-day CS intensive, a two-month CS programming embedding technology into textile design, and other workshops led by CS professionals as after-school programs for youth between 11-18 years old, 6 to 8 times during the 2018-2019 school year.

Carnegie Library of Pittsburgh, in partnership with **Sparkbox web design**, will offer four web design workshops, using a train the trainer model for Librarians and youth, for 15 teens in the Job and Career Education Center supported by the 2018; offer Raspberry Pi workshops for 20 adult patrons and staff to learn and explore this hardware and its applications by 2018.

Carnegie Mellon University (CMU), will expand their CMU CS Academy program to 30 schools, providing a 9th grade graphics-based Python curriculum for free to a new cohort of 30 schools across Pennsylvania by Fall 2018.

Code in the Schools, in partnership with the **Baltimore City Office of IT**, will launch Baltimore: The City that Codes, a city-wide public-private partnership to expand computer science education and job opportunities to the city's youth and residents by Summer 2019.

Code Nation, formerly known as ScriptEd,will bring will bring coding classes to 50 under-resourced high schools and more than 1,000 students in New York City and the San Francisco Bay Area in the 2018-19 school year.

College Board, in partnership with the **states of Arizona**, **Kentucky**, **Massachusetts**, **and Nevada**, **The Chan Zuckerberg Initiative** and **Code.org**, will increase the number of schools offering AP Computer Science Principles (AP CSP) across the four states by 45% in the 2018-19 school year. **CS4NC**, in partnership with the **North Carolina Department of Public Instruction (NCDPI)**, will develop K-12 computer science standards based on the K-12 CS Framework for all K-12 North Carolina students.

CSTA WI Dairyland will launch a multi-year campaign to engage 20% of WI school districts annually in the computer science for all movement through encouraging districts to join the CSforALL Consortium, disseminating the CSforALL District Pledge, the CSforALL Accessibility Pledge and supporting districts in creating and implementing CS education initiatives. CSTA-NM will provide professional development to 250 educators in New Mexico through a statewide PD week and 1 day PD events by June 30, 2019.

Digi-Bridge, in partnership with **Google Fiber**, will host four Code-in events, intended to provide STEM experiences to 140 families in Charlotte, NC in 2018.

Hempfield High School will introduce a new high school math course for 50 students focused on computational thinking and statistics during 2018-2019 academic year.

Indiana Department of Education will provide professional development for 2,500 K-12 teachers to reach the SEA 172 mandate of computer science courses in every Indiana public school by 2021.

Indiana University School of Informatics, Computing, and Engineering will support statewide K-12 computer science education including collaborating with other institutions of higher education to equip K-12 stakeholders to promote computational thinking at the regional and state levels; connect undergraduate and graduate students to service learning opportunities in K-12 outreach; host the Indiana NCWIT Aspirations in Computing Awards serving about 50 high school girls; engaging 100 local students in 2018 CSEdWeek activities; and providing CS summer camps for 75 rural and minority students.

Ithaca City School District will provide introductory CS training to 600 district teachers and administrators; create secondary level CS based courses; launch the CS lending library of curriculum, tools, and robots; meet with the 13 PTA to build community understanding of CS in schools; and host a districtwide CS event by the 2018-2019 school year.

JPMorgan Chase, in collaboration with **CSforALL**, will host a SCRIPT Workshop for 6 Columbus, OH school districts impacting more than 47K students, 2K teachers, and over 70 schools by implementing quality CS education to all students K-12; participate in CSforALL's September Knowledge Forum as a sponsor and panelist. **Juab School District**, in partnership with BootUp PD, will offer professional development empowering 75 teachers to facilitate computational thinking in the 2018-2019 school year. Kentucky Valley Educational Cooperative (KVEC) will create a series of 10 micro-credentials, in the next three years, to enhance teacher professional development in general CS education, and also specific courses such as AP Computer Science.

Loudoun County Public Schools, in partnership with **CodeVA** and **Virginia Department of Education**, will establish an elementary CS Coaches program to develop a professional learning team that will train 50 elementary teachers and create 24 K-5 curricular resources, and will create a strategic action plan to implement K-12 CS standards for the district serving over 82,000 K-12 students.

NCWIT and **CSforALL** will collaborate on new segments for the SCRIPT, CSforALL's framework for school districts, that leverage NCWIT K-12 Alliance members' resources to improve districts' ability to support diverse and inclusive CS education. The new segments will be piloted in summer 2019 and reach at least 50 districts by December 2019.

Project Lead The Way (PLTW) will make available a grant opportunity, up to \$5.4 million dollars over the next 3 years, to provide all of Indiana's 1,700 schools the possibility to implement PLTW PreK-12 CS programs and up to 3,055 teachers to be trained.

Quicken Loans and **Detroit Public Schools Community District** are partnering to create and implement an innovative K-12 computer science blueprint. Through this strategic public-private partnership, the Detroit Public Schools Community District will integrate Computer Science curriculum to reach all elementary school students by 2021, starting with professional development for 3rd - 5th grade teachers and robotics coaches.

REAL-CS will start a 3-year research endeavor, based on a research-practice partnership (RPP) to gather student perspectives and voice on their experiences in the introductory high school CS classroom. REAL-CS will also study, analyze, and disseminate research projects on how CS teachers conceptualize and talk about the influence of race and gender in computing classrooms as they engage in professional learning.

Riverside Unified School District will commit to having at least one K-2 teacher trained in the 2018-2019 school year at each of our 32 elementary schools. Thus, through a combination of shared leadership, administrative and district support, professional development, and access to resources, our 8,802 students in a K-2 classroom will have a CS learning opportunity by 2019-2020.

Riverside Unified School District will partner with the **National Center for Women & Information Technology (NCWIT)** to host regional Counselors for Computing workshops for 35-40 school counselors serving 20,000 students by 2018. **TechBirmingham**, in concert with the City of Birmingham, Birmingham City Schools, and Lawson State Community College, will institutionalize and scale up Birmingham Can Code. Based on Apple's Everyone Can Code curriculum, the program will increase access to computer science education and digital learning to 24,000 Birmingham students in venues including neighborhood libraries.

The Allegheny Intermediate Unit 3 will distribute \$375,000 in STEAM Catalyst Grants in SY 2018-2019 to 23 regional school districts with a focus on coding across the curriculum. Additionally, will host a yearly Computer Science Fair for approximately 200 secondary students by 2018-2019 school year.

The Allegheny Intermediate Unit 3 will expand its STEAM Technology Lending Library, which served 42 school districts and includes 2,000 free resources including technologies supporting computational thinking by the 2018-2019 academic year.

The Allegheny Intermediate Unit 3, with the support of the **Pennsylvania Department of Education**, will create two new Computer Science Coordinator positions to support regional districts and surrounding intermediate units in computer science implementation, serving 242 school districts and 13 intermediate units in the 2018-2019 school year.

The Allegheny Intermediate Unit 3, will expand their regional partnership with Code.org to provide CS professional development, including hiring a project manager and ten workshop facilitators with the goal of preparing 300 elementary and 75 secondary teachers in Western Pennsylvania to integrate computer science by May 2019.

The Carnegie Library of Pittsburgh (CLP), in collaboration with the **Pittsburgh International Game Developers Association**, will hire 7 of new mentors to provide after-school CS education to 27,000 students from 7th and 12th grade, and will create Coding and Robotics kits for their 19 Library Locations.

The Friday Institute will expand their professional learning programs reaching 500 K-12 teachers in 50 school districts, to build holistic K-12 CS/CT pathways and experiences for all students in North Carolina by the 2018-2019 school year.

The Informatics Diversity-Enhanced Workforce (iDEW) will expand from three to eight high schools during the 2018-2019 school year. These schools will offer iDEW computing courses and reach a total of 500 students during the 2018-2019 school year.

The Maryland Center for Computing Education (MCCE) will expand access to high-quality Pre-Kindergarten-12 computing education by strengthening educator skills with training sessions for at least 250 teachers and increasing the number of CS teachers in elementary and secondary education for the 2019-2020 school year. **The Metro Nashville Public School Learning Technology Department** will align 100% of the Computer Science curriculum, vision, goals, and objectives to the newly adopted Tennessee Department of Education Digital Readiness Standards by Winter 2019.

The Metro Nashville Public School Learning Technology Department will increase teacher self-efficacy in Computer Science by 5% by developing and offering a range of professional development focused on computational thinking, problem-solving, and creative design for the district's 250 Pre-K-12 educators by Fall 2019.

The Metro Nashville Public School Learning Technology Department, in partnership with **Republic Charter Schools**, will increase from 18 to 28 the number of middle schools that provide CS curriculum and STEM instruction reaching 900 of students in total by Spring 2020.

The National Math and Science Initiative, in partnership with Bootstrap, Exploring Computer Science, MIT App Inventor, Mobile CSP, NCWIT, Project GUTS, and UTeach Computer Science, will develop a three-year support model for U.S. school systems that want to implement an in-school, evidence-based computer science progression across K-12. With initial support from the Dallas-based O'Donnell Foundation, the NMSI-led coalition will kick off the program in 2019 with three districts that participate in NMSI's College Readiness program via funding from the Department of Defense. That initial launch is expected to reach approximately 100 teachers and more than 30,000 students.

The North Salem Central School District will provide a stand-alone and integrated CS education for 1,107 students in the district by 2021, starting in 6th-12th grade during the first year and expanding to elementary school for 2019-2020 school year.

The **Sacramento County Office of Education (SCOE)** and the **Los Rios Community College District** is launching the CSforSAC 24 in 24 Initiative to introduce 24 high school CS pathways to school districts across the Sacramento Region in 24 months, host two CSforSAC summits, and deliver professional learning opportunities to 24 teachers.

The **United States Patent and Trademark Office (USPTO)**, in collaboration with the **Detroit Public Libraries**, will offer two workshops to K-12 students and teachers on intellectual property, computer algorithms, and apps, expecting 200 attendees during the 2018-2019 academic year.

UMass Amherst, **Springfield Public Schools**, and **Five Colleges Inc**. are partnering to integrate MA DLCS standards-based computer science and computational thinking (CS/CT) across curricula in all 33 elementary schools in the Springfield Public Schools district, beginning with Kindergarten and 3rd grade for the 2018-2019 school year, adding 2 additional grades each year, and reaching all 33 schools serving 12,000 K-5 students in 4 years.

Vidcode, in partnership with **Makematic**, will provide their Creative Coding for Teachers course to introduce coding concepts which can be applied across the curriculum, free of charge to any Minneapolis Public School teacher during the 2018-2019 school year.

When Doves Code, in partnership with NEW Tech Group and the Detroit Public School and Community District (DPSCD), will pilot the Tech Me With U program to provide professional development for 100 Detroit teachers to deliver high-quality, equitable CS education serving 300 middle and high school students by 2020.

Wahóňpi Lakota Language Nest/Wičhákini Owáyawa School, with support from Sitting Bull College, will develop a Wakáğapi iyéhaŋtu Makerspace that is culturally-relevant, project-based, and taught 100% in the Lakota language. The Wakáğapi iyéhaŋtu Makerspace will be available to 6 students in grades K-4 by 2019.