NATIONAL COMPUTER SCIENCE SUMMIT FOR STATE LEADERS

The Arkansas Governor’s Mansion
June 10, 2019
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On behalf of the State of Arkansas, I would like to welcome each of you to the Governor's Mansion in Little Rock for the Computer Science Summit for State Leaders.

Over the past four years, I have focused on building a world-class education system in both Arkansas and around the United States. This effort is vital to the economic welfare and security of Arkansas and our entire nation. As co-chair of Governors for K-12 Computer Science, a group of bi-partisan state leaders who are committed to advancing policy and funding to expand access to and increase equity in K-12 Computer Science education, this has been an important cornerstone of my administration.

Today we hope to explore how to best address policy, academic standards, professional development, budgets, and other pertinent topics that can help advance computer science for employers, industry, and the country. We are pleased that each of you are participating in this valuable discussion with your peers as we discuss how to best implement Computer Science in each of our states with those attending including governors, commissioners, state superintendents, and key legislators.

I thank each of you for your commitment to education and for your participation in this event. Your continued dedication and efforts are key in increasing access to K-12 Computer Science education.

As Governor, I extend my gratitude to those who have traveled to visit the great State of Arkansas for this occasion. Arkansas is honored to have you here, and I hope you enjoy your stay in our beautiful Natural State. I look forward to an informative and successful event as we strive to advance education across our great country.

Sincerely,

Asa Hutchinson
COMPUTER SCIENCE IN EDUCATION

Computer science education is an essential part of maintaining the competitiveness and economic health of our states and our nation.

Computing jobs are the #1 source of new wages in the US

500,000 current openings

These jobs are in every industry and every state, and they're projected to grow at twice the rate of all other jobs.

The majority of schools don’t teach computer science

90% of parents want their child to study computer science

35% of high schools teach computer science

The “STEM” problem is in computer science

58% of all new jobs in STEM are in computing

10% of STEM graduates are in Computer Science

Solving the diversity problem begins in K-12

Women who try AP Computer Science in high school are ten times more likely to major in it, and Black and Latinx students are seven times more likely.

What subjects do students like “a lot”?

Students enjoy computer science and the arts the most!

Source: Code.org
AGENDA

Monday, June 10, 2019

Welcome and Summit Introduction 8:30 a.m. - 9 a.m.
Governor Asa Hutchinson

The Arkansas Story 9 a.m. - 9:30 a.m.
Governor Asa Hutchinson
Commissioner Johnny Key Arkansas Department of Education
Anthony Owen Chief State STEM Officer and Director of CS Education
Gerri McCann Teacher, Manila High School
Sheila Boyington CEO, Thinking Media, Moderator

Why Computer Science Now? 9:30 a.m. - 9:45 a.m.
Hadi Partovi Founder and CEO, Code.org

Audience Feedback 9:50 a.m. - 9:55 a.m.

Importance of Policy, Legislation, Standards and Teachers 9:55 a.m.-10:45 a.m.
Mary Snapp Corporate Vice President, Philanthropies, Microsoft, Moderator
Cameron Wilson COO and President, Code.org
Claus von Zastrow Principal, Education Commission of the States
Ruthe Farmer Chief Evangelist, CSforALL
Jake Baskin Executive Director, CS Teachers Association

Coding Activity and Break 10:45 a.m. - 11 a.m.

Conversation with Commissioners, Superintendents 11 a.m. - Noon
Commissioner Dr. Wayne D. Lewis Jr Kentucky
Superintendent Dr. Carey M. Wright Mississippi
Superintendent Mark Johnson North Carolina
Commissioner Dr. Penny Schwinn Tennessee
AGENDA

Governors’ Address (Lunch) Noon - 1 p.m.
Governor Kim Reynolds Iowa
Governor Henry McMaster South Carolina

Post-Secondary and Workforce Discussion 1:05 p.m.-1:40 p.m.
Dr. Maria Markham Director, Arkansas Department of Higher Education - Moderator
Dr. David Reed Professor, Director of Computer Science, Creighton University, Nebraska
Dr. Bryan Hill Associate Dean, University of Arkansas College of Engineering
Dr. Ambareen Siraj Founding Director, Cybersecurity Education Center, Tennessee Tech University, Tennessee
Dr. Charles Nash Senior Vice Chancellor for Academic and Student Affairs, University of Alabama System

Audience Feedback 1:40 p.m. - 1:45 p.m.

Governors / Commissioners Private Discussion

Table Breakouts and Discussion 1:45 p.m. - 2:30 p.m.

Short reports / Q&A 2:30 p.m. - 2:50 p.m.

Closing and Call to Action 2:50 p.m. - 3 p.m.
Governor Asa Hutchinson

UALR Optional Event 3 p.m. - 5 p.m.

#CSSummit19 WiFi: GuestofTheState Password: Mansion1800
**GOVERNORS**

**Governor Asa Hutchinson, Arkansas**

Asa Hutchinson is the 46th governor of the State of Arkansas. In 2018, he was re-elected with 65 percent of the vote, more votes than any other candidate for governor has received in state history. Under his leadership, the state has won recognition as a leader in computer science education.

From Governor Hutchinson’s first day in office, he has made education one of his highest priorities, and computer science has been a priority of his education initiatives. During his first month as governor, Governor Hutchinson became the first governor in the country to sign legislation that required all public high schools to offer courses in computer science. Since then, Arkansas has become a national leader in computer science education, and the only state in the nation that meets all nine policy recommendations from Code.org. When he took office in 2015, 1,104 students were enrolled in a computer science class in Arkansas. At the start of the 2018-2019 term, the enrollment was at 8,044 students, an increase of 620 percent. The number of girls in computer science has increased more than 1,000 percent, from 223 in 2014-2015 to 2,484 this year. The state’s educators have embraced this initiative. The number of teachers who are teaching computer science has grown from 20 to 372. The governor maintains an active role in encouraging students to take computer science classes. He has visited more than 70 high schools on his Coding Tours.

Governor Hutchinson grew up on a small farm in Gravette. He is a graduate of the University of Arkansas law school. He and his wife, Susan, have been married 45 years. They have four children and six grandchildren.

**Governor Kim Reynolds, Iowa**

As Iowa’s 43rd Governor, Kim Reynolds is determined to make sure that Iowa’s success is every Iowan’s success. Whether it’s preparing Iowans for cutting-edge careers, fighting for education, improving access to health care and mental health care, or empowering our rural communities, Governor Reynolds’s priorities are making a difference in all four corners of the state. Her vision keeps Iowans at the center of all decisions, especially in the area of fiscal responsibility. Governor Reynolds knows that when Iowa taxpayers are able to keep more of their money, great things happen.

Governor Reynolds’s strong voice for international trade, agriculture, and advanced manufacturing is opening new markets and maintaining relationships with many international leaders. As chair of the Iowa STEM Council, she has made the advancement of this work in Iowa a priority.

Although she’s traveled the world telling Iowa’s story, Governor Reynolds is still a small-town girl at heart with common-sense values. These principles are reflected in the Governor’s Empower Rural Iowa initiative and Future Ready Iowa. At age 57, Governor Reynolds earned a bachelor’s degree from Iowa State University. Kim and her husband, Kevin, have three happily married daughters (Jennifer, Nicole and Jessica), and they love to spend time with their 10 very active grandchildren.

**Governor Henry McMaster, South Carolina**

Henry Dargan McMaster of Columbia became the 117th Governor of South Carolina on January 24, 2017, and was elected to his first full term as governor on November 6, 2018. Since becoming governor, Governor McMaster has announced more than 26,000 new jobs and over $8.2 billion in capital investment. The state’s unemployment rate is the lowest in recorded history and more people are working in South Carolina than ever before. He previously served two years as lieutenant governor, eight years as attorney general, and four years as a U. S. Attorney. As attorney general, Governor McMaster made prosecution of criminal domestic violence a top priority, and he harnessed the resources of law enforcement and prosecutors to crack down on child Internet predators. He extended the state grand jury’s jurisdiction to criminal domestic violence a top priority.

Governor McMaster grew up in the U.S. Army Reserves in the JAG Corps from 1969 to 1975. He previously received his AB degree in history in 1969 from the University of South Carolina and his JD degree in 1973 from the University of South Carolina School of Law, where he served on the South Carolina Law Review. He served in the U.S. Army Reserves in the JAG Corps from 1969 to 1975.

Governor McMaster and his wife, Peggy, have two children, Henry D. McMaster Jr. and Mary Rogers McMaster. They are members of First Presbyterian Church of Columbia.
STATE SUPERINTENDENTS

**Commissioner Johnny Key**, Arkansas

Under Johnny Key’s leadership, the Arkansas Department of Education has concentrated on student-focused education. The mission is to provide leadership, support, and service to schools, districts, and communities so that every graduate is prepared for college, a career, and community engagement. Prior to his appointment as commissioner, Mr. Key served as associate vice president for university relations at the University of Arkansas System, a position he assumed in August 2014. Mr. Key began his career in public service in 1997 as a justice of the peace on the Baxter County Quorum Court. He was elected to three two-year terms in the House of Representatives. He was elected to the Senate in 2008.

**Superintendent Mark Johnson**, North Carolina

North Carolina Superintendent Mark Johnson began his career in education as a teacher at a school in an economically challenged part of Charlotte, North Carolina. Mr. Johnson later served as a school board member for one of North Carolina’s largest districts before his election as state superintendent. Having served as a teacher and an education leader who has a young daughter in a North Carolina public school, the improvement of education is a personal mission for Mr. Johnson. As the leader of North Carolina’s public schools, Mr. Johnson emphasizes positive transformation from industrial-age tactics to digital-age approaches that will improve our education system for students and educators.

**Commissioner Dr. Wayne D. Lewis Jr.**, Kentucky

Dr. Wayne D. Lewis has more than 15 years of experience in education, including stints in public school districts, post-secondary institutions, and in state government. He has worked as a classroom teacher, teacher educator, post-secondary faculty member, and program administrator at the undergraduate and graduate levels, and as an executive administrator in state government. Prior to his appointment as commissioner, Dr. Lewis served as an appointed advisor to the Kentucky Board of Education, the Education and Workforce Secretary’s Designee on Kentucky’s Early Childhood Advisory Council, and chair of Kentucky’s Charter Schools Advisory Council. He has published work in the areas of education policy and politics, school-family-community engagement, and school choice at the local, state, and national levels.

**Commissioner Dr. Penny Schwinn**, Tennessee

Dr. Penny Schwinn is committed to building on Tennessee’s momentum of the past decade, and plans to continue to accelerate growth through excellence in achievement, empowerment of students and teachers, and engagement of all stakeholders. She began her work as a high school teacher in Baltimore, and as a new-teacher coach in south Los Angeles. Prior to joining the Tennessee Department of Education, she served as the Chief Deputy Commissioner of Academics for Texas. She also has served as an Assistant Secretary of Education for Delaware and as Assistant Superintendent of Performance Management for Sacramento. She is also the founder and former Superintendent of Capitol Collegiate Academy, which became one of the county’s highest-performing charter schools serving low-income students in Sacramento.

**Superintendent Dr. Carey M. Wright**, Mississippi

Dr. Carey M. Wright became the State Superintendent of Education in 2013. Under her leadership, Mississippi has initiated aggressive education reforms that have increased literacy skills in pre-K through the 3rd grade; pushed student achievement on the NAEP to improve at a faster rate than most other states; and increased the graduation rate to an all-time high of 84 percent. Dr. Wright spearheaded initiatives that nearly doubled the rate of participation and success in Advanced Placement education, which produced significant annual gains in proficiency in English Language Arts and Mathematics, and earned Mississippi recognition from the National Institute for Early Education Research as one of only five states in the nation that meets the majority of quality standards for early childhood education. Dr. Wright is past president of the Board of Directors of the Council of Chief State School Officers (2017-18) and is a member of the Broad Academy and Chiefs for Change.
Hadi Partovi, Code.org

Hadi Partovi is a tech entrepreneur and investor, and CEO of the education nonprofit Code.org. Mr. Partovi was born in Iran and grew up during the Iran-Iraq war. After immigrating to the United States, he worked as a software engineer to pay his way through high school and college. Upon graduating from Harvard with an M.S. in computer science, Mr. Partovi worked at Microsoft, where he rose into the executive ranks. He founded two tech startups Microsoft and Newscorp bought. He has served as an early advisor or investor at many tech startups including Facebook, Dropbox, Airbnb, and Uber. In 2013, Mr. Partovi and his twin brother, Ali, launched the education nonprofit Code.org. Code.org has established computer science classes that reach 30 percent of U.S. students, created the most broadly used curriculum platform for K-12 computer science, and launched the global Hour of Code movement, which has reached hundreds of millions.

Jake Baskin, CS Teachers Association

Jake Baskin is the Executive Director of the Computer Science Teachers Association. He is a former high school computer science teacher, department chair, and professional development provider with the Chicago Public Schools. As a teacher, he focused on increasing access to computing for underrepresented groups and more than doubled female enrollment in introductory computer science classes. Prior to joining CSTA, he was Director of State Government Affairs for Code.org. In his work at Code.org, he helped to build a nationwide network of more than 40 regional partners that worked with over 100 school districts in the U.S. to implement comprehensive computer science programs.

Sheila Boyington, Thinking Media

Sheila is President and CEO of Thinking Media, a Chattanooga-based educational technology firm and creator of Learning Blade®, a system that increases awareness and interest in STEM careers with two statewide contracts and use in 30 states. Sheila also serves as the National Senior Advisor to STEMconnector® and National States Chair for Million Women Mentors® and has worked to build over 40 state MWM leadership teams. As co-founder of Thinking Media she created ACT’s KeyTrain® system for Workkeys® (acquired by ACT in 2011 with over 28 state contracts) and PictureRx® for health literacy. Sheila is Professional Engineer, and holds a M.S. in Civil/Environmental Engineering from the Univ. of California at Berkeley and a B.S. in Chemical Engineering from the Univ. of Florida.

Ruthe Farmer, CSforALL

Ruthe Farmer has been a national advocate for gender equity and diversity in technology since 2001. At CSforALL, she serves as Chief Evangelist. She served as Senior Policy Advisor for Tech Inclusion at the White House Office of Science & Technology Policy, focusing on President Obama’s call to action for CSforAll, led strategy and K-12 programs at the National Center for Women & Information Technology, and implemented national tech and engineering programs at Girl Scouts of the USA. She has launched multiple national inclusion programs, served as 2012 Chair of CSEDWeek, and was named a White House Champion of Change. Ms. Farmer holds a BA from Lewis & Clark College and an MBA in Social Entrepreneurship from the University of Oxford.

Dr. Bryan Hill, University of Arkansas College of Engineering

Dr. Bryan Hill earned a B.S. and M.S. in Industrial Engineering and a Ph.D. in Public Policy from the University of Arkansas. Currently, Dr. Hill is the Associate Dean for Student Success at the University of Arkansas College of Engineering. Dr. Hill is also director of UAteach, a secondary math, science, and computer science teacher education program. Dr. Hill has more than 15 years of experience in student recruitment, retention, diversity initiatives, K-12 outreach programs, and international education. Since 2009, the College’s undergraduate enrollment has increased 97 percent, female enrollment has increased 141 percent, and minority enrollment is up 161 percent. Dr. Hill is Principal Investigator on STEM educational and outreach grants totaling $6.6 million. He was one of the Top 15 Researchers in 2015 at UA.

Dr. Maria Markham, Arkansas Department of Higher Education

Dr. Maria Markham began service at the Arkansas Department of Higher Education in August 2016, but her history with higher education in Arkansas spans more than a decade. She has worked in almost every facet of higher education at both a community college and a university; she has been a work-study student, grant director, full-time faculty, adjunct, division chair, chief academic officer, and now an agency leader. She received a BBA in Marketing and an MBA from Henderson State University. She later received her Ph.D. in Business with a specialization in Organizational Leadership from NorthCentral University. Dr. Markham was recently named one of Arkansas’s 40 Under 40 most Intriguing Business and Political Leaders.

Gerri McCann, Manila High School

Gerri McCann is a superstar teacher at Manila High School in Arkansas. She currently teaches French, English, journalism, photography AND computer science. She has found a way to integrate technology into teaching all of these subjects and has led students to awards in the Congressional App challenge, FBLA mobile apps, Technology Student Association Computer Coding with first and third place teams, among many others. She also led students to competing and winning the Governors Coding competition. She holds a B.S. in Education and a M.S. in Information Systems and E-commerce from Arkansas State University. She has been a teacher since 1995 in several districts in Arkansas.
Dr. Charles Nash, University of Alabama System
Dr. Charles Ray Nash is Vice Chancellor for Academic and Student Affairs and the chief liaison officer to officials at UA, UAB, and UAH. He is also the System’s liaison to the Alabama Department of Education, Alabama Community College System, and the Alabama Commission on Higher Education. Prior to joining the University of Alabama System, Dr. Nash was Associate Executive Director for the Commission on Colleges at the Southern Association of Colleges and Schools (SACS), Dean of the School of Education of Armstrong Atlantic State University, and Assistant Vice Chancellor for Academic Development of the University System of Georgia. He chairs accreditation committees for SACS/COC and serves on accreditation committees for the American Bar Association.

Anthony Owen, Arkansas Department of Education
Anthony Owen serves as the leader of the computer science initiative in Arkansas. He coordinates with Governor Asa Hutchinson’s Computer Science Task Force to identify the state’s computer science and technology needs. Mr. Owen began working at ADE in 2011 as the K-12 math and computer science curriculum specialist. He has worked as a math and science teacher at Sheridan High School, Gurdon High School, Goza Middle School at Arkadelphia, and England High School. Mr. Owen received a B.S. in Mathematics with a minor in Education and Computer Science and an M.S. in Education in Educational Leadership from Henderson State University at Arkadelphia. He has a J.D. from the University of Arkansas at Little Rock Bowen School of Law.

Dr. David Reed, Creighton University
Dr. David Reed is an Associate Professor and Director of Computer Science & Informatics at Creighton University in Omaha, Nebraska. His primary interests are in programming languages and computer-science education. He has published extensively on topics such as apprentice-based learning, Web-based programming, and innovative instructional methods in introductory computer science. Dr. Reed is author of a CS0 text which has been widely adopted at colleges and high schools. He has been an active contributor in the Advanced Placement Computer Science program for more than two decades, serving as Chief Reader from 2004 through 2008. He also served on the ACM/IEEE Computer Science 2013 Steering Committee. He is a member of the Liberal Arts Computer Science Consortium and is Chair of the Board of Directors of the Computer Science Teachers Association.

Dr. Ambareen Siraj, Tennessee Tech University
Dr. Ambareen Siraj is a Professor of Computer Science at Tennessee Tech University. She has authored/co- authored around thirty journal and conference articles on security. Her other roles include: Lead, National Science Foundation (NSF) Project: “CyberWorkshops: Resources and Strategies for Teaching Cybersecurity in Computer Science,” Lead, NSF Project: “Capacity Building in Cybersecurity: Broadening Participation of Women in Cybersecurity through Women in Cybersecurity Conference & Professional Development,” Lead, NSF Project “Security Knitting Kit: Integrating Security into Traditional CS Courses.”

Mary Snapp, Microsoft
Mary Snapp is the Corporate V.P. of Microsoft Philanthropies and leads the efforts that bring to life the company’s mission to empower every person and every organization on the planet to achieve more. The team invests the company’s strongest assets to partner with nonprofits and communities to create lasting positive impact. Ms. Snapp joined the company in 1988 as Microsoft’s first female attorney. Prior to her current role, she supported the business and engineering organizations. On behalf of the legal department, she was the executive sponsor of the Diversity and Inclusion initiative for over a decade. Ms. Snapp has been active on boards in numerous nonprofits including those engaged in human services, arts, education, and advancement of diversity in the legal profession.

Claus von Zastrow, Education Commission of the States
At ECS, Claus von Zastrow oversees efforts on a range of initiatives including the improvement of state education data and strengthening STEM education. He has held leadership positions in education policy and research for more than 17 years and has spent much of that time helping diverse stakeholders find consensus on important education issues. His reports and analysis have been cited by dozens of media outlets, including the Washington Post, The New York Times, the PBS NewsHour, Politico, USA Today, and US News & World Report. Mr. von Zastrow is dedicated to ensuring that state leaders have the information and guidance they need to make the best possible decisions that affect young people.

Cameron Wilson, Code.org
Cameron Wilson is the COO and President of Code.org Advocacy Coalition. He helped create Computer Science Education Week, and has served on the Advancement Placement Computer Science Principles Advisory Commission, coauthored a major study on K-12 computer science education – “Running on Empty: The Failure to Teach K-12 Computer Science in the Digital Age” – and helped direct the University of Chicago’s study “Building an Operating System For Computer Science Education.” He joined Code.org in June of 2013. Before Code.org, he was Director of the Office of Public Policy for the Association for Computing Machinery. He joined ACM after spending 10 years on Capitol Hill, where he served as Deputy Chief of Staff to U.S. Representative Vernon Ehlers (R-Michigan) and on U.S. Representative Nick Smith’s (R-Michigan) staff, and as staff on the House Science Committee.
"Of all the big-ticket items we’ve dealt with since I’ve been governor, this relatively small-ticket item may have the greatest long-term impact."

-Asa Hutchinson

Governor Hutchinson’s leadership on computer-science education has garnered the state national recognition, from the White House to national media outlets and tech companies, including: