July 2021 | *Monthly Newsletter* | Vol 3 Issue 1

COMPUTER SCIENCE in ARKANSAS

THE GREAT ARKANSAS HISTORY VIDEO GAME CODING COMPETITION WINNERS ANNOUNCED

The Great Arkansas History Video Game Coding Competition (GAHVGCC) announced it's winners for this year's competition!

The winners are:

1st Place - Team 1, Hellstern Middle
2nd Place - Team 3, Arkansas Arts Academy Elementary/Middle
3rd Place - Team 2, Arkansas Arts Academy Elementary/Middle

If you didn't get a chance to participate, you missed out! This competition has an amazing tie to Arkansas History, and gives our fourth through eighth grade students a chance to learn more about coding while exploring the history of our great state. This year's theme was the Old Gray Lady, better known as the Arkansas Gazette newspaper.

Hellstern Middle School of the Springdale School District won the competition for the second year in a row. This year Casey Elliott, Chris Arrue-Martinez, Elijah Reed, Eurel Roman, Reece Stephens, and Will Gladden produced the winning submission. Jamie Walker served as the teacher advisor for the team. These students will each receive a $1,000 award, in addition to a $2,500 award for the school. Their submission is playable here: https://flowlab.io/game/play/1555013.

Two single-student teams, both sponsored by Mai Le from Arkansas Arts Academy in Rogers, won the second and third place prizes. The students, Corissa Arnold (second place) and Britton Dixon (third place), will each receive a #CSforAR prize kit.

Students who participated this year will receive a Circuit Playground Express coding device. This contest will start anew this fall with a brand new topic, and provide Arkansas middle schools a new opportunity to compete. While this competition gives a chance for students to earn cash or prizes, it is very much in alignment with our middle school CS standards. Beginners are most welcome, too! Many submissions used the commonplace Scratch as their coding platform, though almost all coding platforms are acceptable.

For more information, please visit http://bit.ly/ARCSHistComp.

ARKANSAS COMPUTER SCIENCE AND COMPUTING EDUCATOR ACADEMY

The ADE Office of Computer Science has kicked off the inaugural 2021 Arkansas Computer Science and Computing Educator Academy (ACSCEA). The training sessions were hosted both virtually and on the campus of Arkansas Tech University (ATU) in Russellville.

One of the main benefits for participating in the ACSCEA is that members are able to earn postsecondary credits for academy completion and get the specialized training that is aligned to state-adopted programs of study! The ACSCEA also provided another option for Arkansas residents to:

- Learn basic computer science, which provides a starting point for new teachers to be successful,
- Receive preparation for passing the Computer Science Content Knowledge Praxis exam,
- Gain approval to teach high school computer science courses,
- Earn postsecondary credits for academy completion, and
- Expand skills in specialized areas aligned to state-adopted programs of study.

In addition to the six graduate-level hours, participants who successfully completed the 90 hours of training, and hold an Arkansas Educator's License, will be awarded a 5016 Computer Science Approval Code. In its inaugural year, we had 22 participants that had great things to say about the program:

"I didn't realize that so much was involved in pseudocode before participating in the academy. The presentations about various computer science topics during our working lunches were also interesting and informative." - Anita Cegers-Coleman

"ACSCEA was an all-around amazing experience. The Computer Science Team at the Academy were extremely helpful and answered every single question I had about Computer Science education in the state of Arkansas. The instruction was logically put together to help Arkansas teachers learn the basics of Computer Science by writing code along with preparing for the Computer Science Praxis exam. With so many different pieces of technology being used in the training, Arkansas Tech did a great job hosting the ACSCEA. I would highly recommend this training for any Arkansas teacher who has any interest in teaching Computer Science in our state." - Mark Mitchell

"Before the academy I knew next to nothing about computer science, but since the academy I feel much better prepared to teach computer science." - Rachel Fish

Feel free to reach out to us if you have any questions or concerns. You can reach out to the team at CSforAR@ade.arkansas.gov.

The CSforAR Team with ATU in-person participants.

REMAINING SUMMER ADVANCED TRAININGS

VISIT BIT.LY/ARCSPD FOR MORE INFORMATION AND LINKS TO REGISTER!

ADVANCED ROBOTICS

This workshop is face-to-face only, and will be held July 26-28, 2021 at Arkansas Tech University.

This workshop will address how to teach to the Robotics standards using various resources and how to apply robotics concepts regardless of the resource used. Participants will build and program robotic systems and explore various robotic and industry related concepts through engaging activities and dynamic lessons.

This 3-day workshop is for those who hold the 528 Computer Science Teacher Certification, 5016 Computer Science Approval Code, or 5014 Computer Science Approval Code and who plan on teaching any level of Robotics, although this PD is going to have a focus on teaching to the year 2 and year 3 Robotics standards.

ADVANCED PYTHON PROGRAMMING

This workshop is online only, and will be held July 26 - 28, 2021.

Participants will be introduced to the syntax of the Python 3 language. Topics covered will include, but not limited to, turtle graphics, object-oriented programming, file input/output, event programming, and exception handling.

This 3-day workshop is for those who hold the 528 Computer Science Teacher Certification, 5016 Computer Science Approval Code, or 5014 Computer Science Approval Code and have a fundamental understanding of computer programming.

ADVANCED AP COMPUTER SCIENCE A

This training includes an overview of the AP Computer Science A Course and Exam Description along with lab activities that can be used to teach key concepts. The workshop covers the AP CS A units of Data Types, Objects, Logical Operators, Iteration, Arrays, Inheritance and Recursion.

This workshop is offered online only, and will be held July 19 - 23, 2021. Visit bit.ly/CSforARPD for more information and contact CS Specialist Lori Kagebein at lori.kagebein@ade.arkansas.gov regarding any questions about this specific PD offering.

ADVANCED NETWORK/HARDWARE

This workshop is online only, and will be held July 19- 21, 2021.

This workshop will begin with a brief refresher on the basics of TCP/IP configuration, i.e. IP addresses, subnet masks, default gateways, and what these terms represent. Following this introduction, attendees will be presented with the Ad basics of network protocols and packet capture. The workshop will cover the OSI model, particularly the operation of Layer 2 network technologies including switches, Ethernet, and VLANs, before moving on to Layer 3, routing, and the fundamentals of WAN technologies such as Frame-Relay, ATM, PPP, and Ethernet on WANs.

The operation of popular network services such as DHCP, DNS, and application layer protocols such as HTTP will be presented in-depth. Here you will find a series of tutorials to help get you comfortable with cybersecurity and networking concepts and topics . -> Evergreen - Advanced Cyber and Networking Pregame Resources

This 3-day workshop is for those who hold the 528 Computer Science Teacher Certification, 5016 Computer Science Approval Code, or 5014 Computer Science Approval Code and are comfortable with using computers.

WHAT YOU'RE MISSING! IT'S NOT TOO LATE!

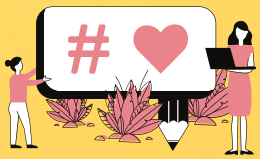
VISIT BIT.LY/ARCSPD FOR MORE INFORMATION AND LINKS TO REGISTER!

5-8 DEEPER DIVE:

"The most valuable part is how passionate and how knowledgeable they are about what they are doing. It makes it exciting and gives me hope for my students."

CODING BLOCK

"Everything was new to me, I feel as if I am walking away with a lot of knowledge."



K4 INTRODUCTION

"Digestible introduction into computer science - not overwhelming. Useful classroom tools and lesson plans."

CB RESOURCES

"Wonderful virtual PD! I was worried to see how much I would gain from this because it was virtual!

They crushed my doubts! I have so many resources that I can take straight into the classroom and use! Project examples galore! Thank you."

K4 DEEPER DIVE

"The ability to practice the information presented and ask questions. Collaborating in breakout rooms was also helpful."

HIGH SCHOOL:

"I am semi-self taught coder/computer science instructor. this helped me fill in a ton of gaps I have and I feel confident to take the Praxis. thank you. "

5-8 INTRODUCTION

"The training was very practical and was not just sitting and listening for 2 days. We had a chance to interact with tools that we will be using in classrooms and encountering issues that our students will surely have so that we can be prepared to handle them."

LearningBlade® CORNER

Learning Blade has released their Year-End report, and we are excited to announce that Arkansas is approaching 1.4 million lessons. That is the highest of any state! Learning Blade provided 92 Professional Development Events and had some great results from teachers and student surveys, and are looking forward to continuing the effort next year.

Visit here to see Arkansas's Learning Blade Year-End report.

Learning Blade Corner - a monthly snapshot of happenings with Learning Blade in AR.

UPCOMING TRAINING

bit.ly/CSforARPD

#CSFORAR COFFEE CAFE

bit.ly/ARCSCoffee

CONTACT US

Four Capitol Mall
Little Rock, AR 72201

CSforAR@ade.arkansas.gov

CS FOR AR

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#ARKidsCanCode #CSforAR

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