

CS4App: CS4All targeting the rural Appalachian region

Summer 2021 Activity Schedule

Main Project Website: <https://cs.appstate.edu/cs4all/>

How to Navigate this Document

Items in underlined blue are hyperlinks. Clicking on them opens a pop up with the actual hyperlink (really, Google, why twice?). Click that second link and it jumps you further down in this document to the appropriate location.

Or you can do a Ctrl-F (Command-F for Mac users) to “find” something using the search box.

Or you can just scroll, as you wish.

Workshop View

Week 1 June 14 - 18: **Build Up**

[Weekly Summary View](#)

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Week 2 June 21 - 25: **Friday Institute Workshop**

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Week 3 June 28 - July 2: **Deeper dive into Code.org AP CSP course content**

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Week 4 July 6 - 9: **Adapt to your local context**

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Weekly Summaries

Week 1: Build Up

Monday June 14

Leadership Workshop, Welcome from our Dean, Computing and Society: Cybersecurity

Tuesday June 15

Advancing Digital & Media Literacy, Building a Successful NIC, CS Unplugged, Snap

Wednesday June 16

Inclusive Excellence, Diversity, Snap Programming

Evening speaker series (Dr. Gregg Marland topic)

Thursday June 17

Snap Programming, Javascript Programming

Friday June 18

Equity, Javascript Programming

Week 2: Friday Institute

Monday June 21

What is CSP?

Tuesday June 22

The Role of the Teacher

Wednesday June 23

Understanding our Responsibility

Wednesday evening speaker series (Honeybee research at App State)

Thursday June 24

Creating an Inclusive CS Classroom

Friday June 25

Putting it All Together

Week 3: Deeper dive

Monday June 28

Challenges recruiting & engaging high school students, *Jennifer LeBlanc, West Wilkes HS*

Content deep dive (Unit 1 - start of course)

Tuesday June 29

___Content deep dive (Units 4,5 - programming)

Wednesday June 30

___High school CS landscape, Content deep dive (Units 6,7 - algorithms, programming)

Evening speaker series (The math behind Origami)

Thursday July 1

___Content deep dive (Unit 8 - PT prep)

Friday July 2

___CS standards landscape, Content deep dive (Unit 9 - programming)

Week 4: Locally Adapt

Tuesday July 6 - Friday July 9

Whatever you need to do! (Prep a Canvas course, build out materials, explore Code.org as a verified teacher, practice unplugged activities, content deeper dives)

___Wednesday evening speaker series (Baker Perry topic)

Daily Summaries

Week 1: Build Up

Monday June 15th

- 8:30 - 9:00 Arrival, continental breakfast
- 9:00 - 11:55 Leadership: Getting to Know Your Team, Becoming a Team, Moving Forward as a Team
Courtney Holder, Alyssa Rodriguez, Lauren Watson, App State Leadership Studies
- 12:00 - 1:00 Lunch (on your own)
- 1:00 - 1:10 Welcome remarks by **Dr. Neva Specht**, Dean of College of Arts and Sciences
- 1:10 - 4:50 Computing and Society: Cybersecurity
Current threat landscape, Challenges, Security posture and improving it
- 4:50 - 5:00** [Link to Individual daily checkpoint](#)

Tuesday June 15

- 8:30 - 9:00 Arrival, continental breakfast
- 9:00 - 10:25 Advancing Digital and Media Literacy
Dr. Sarah Zurhellen and Mr. Mark Coltrain, Writing Across the Curriculum Program
- 10:25 - 10:35 Break
- 10:35 - 11:55 Building a Successful Networked Improvement Community (NIC)
Dr. Tracie Salinas, Director of App State Math and Science Education Center
- 12:00 - 1:00 Lunch (on your own)
- 1:00 - 3:00 [Computational Thinking with CS Unplugged](#)
- 3:00 - 3:15 Break
- 3:15 - 4:50 [Introduction to Programming using Snap](#)
- 4:45 - 4:55 **Self-efficacy evaluation**
- 4:50 - 5:00** [Link to Individual daily checkpoint](#)

Wednesday June 16

- 8:30 - 9:00 Arrival, continental breakfast
- 9:00 - 10:15 Inclusive Excellence, *Elizabeth Bellows, App State Center for Academic Excellence*
- 10:15 - 10:30 Break
- 10:30 - 11:55 YouTube: [Why diversity matters to technology innovation](#)
Who are the underprivileged and underrepresented students in CS?
- 12:00 - 1:00 Lunch (on your own)
- 1:00 - 2:30 [Why Programming is Hard](#) and [More Snap! Programming](#)
- 2:30 - 2:45 Break
- 2:45 - 4:45 [Even MORE Snap! Programming](#)
- 4:50 - 5:00** [Link to Individual daily checkpoint](#)
- 5:00-6:00** **Distinguished Speaker Series: Topic Global Climate Change: The Physics and Chemistry and a Little Data Science,**
Dr. Gregg Marland, Geological and Environmental Sciences

Thursday June 17

- 8:30 - 9:00 Arrival, continental breakfast
- 9:00 - 10:15 [Snap! Programming with Finch robots](#)
[RET activity repository](#) (incl. Finch activities but older activities are using older version of Scratch that is not SNAP compatible yet; we are working on updating)
[Other devices that work with Snap](#)
- 10:15 - 10:30 Break
- 10:30 - 11:55 More: Snap! Programming with Finch robots
- 12:00 - 1:00 Lunch (on your own) <https://cs.appstate.edu/ret/repository.php>
- 1:00 - 2:30 [Introduction to Javascript programming](#)
- 2:30 - 2:45 Break
- 2:45 - 4:50 More Javascript programming
- 4:50 - 5:00** [Link to Individual daily checkpoint](#)

Friday June 18

- 8:30 - 9:00 Arrival, continental breakfast
- 9:00 - 10:20 Equity, Diversity, and Inclusion, Andrew Bellemer, Biology, Appstate
- 10:20 - 10:30 Break
- 10:30 - 11:55 YouTube: [Increasing Diverse Participation in Computing by Mitigating Biases and Barriers](#)
- 12:00 - 1:00 Lunch (on your own)
- 1:00 - 3:00 Javascript programming
- 3:00 - 3:15 Break
- 3:15 - 4:45 Javascript programming FINALE pair project
CS Teaching Tips: [\[Main Site\]](#) [\[Pair Programming\]](#)
- 4:50 - 5:00** [Link to Individual daily checkpoint](#)

Daily Summaries

Week 2 - Friday Institute Code.org training

Monday June 21

- 8:30 - 9:00 Arrival, continental breakfast
- 9:00 - 10:15 Welcome, Intro to CSP
- 10:15 - 10:25 Break
- 10:25 - 12:20 CED, Unit 1 overview, U1L1, Model Lesson #1: U1L2
- 12:20 - 1:20 Lunch (on your own)
- 1:20 - 2:25 Model Lesson #1: U1L3
- 2:25 - 2:35 Break
- 2:35 - 4:50 Binary numbers, Lesson types, Lesson planning
- 4:50 - 5:00** [Link to Individual daily checkpoint](#)

Tuesday June 22

- 8:30 - 9:00 Arrival, continental breakfast
- 9:00 - 10:00 Teachers role in the classroom and in formative assessment
- 10:00 - 10:10 Break
- 10:10 - 12:20 Lesson planning, U1L7, U1L8
- 12:20 - 1:20 Lunch (on your own)
- 1:20 - 2:20 U1L9
- 2:20 - 2:30 Break
- 2:30 - 4:50 U1L10, U1 conclusions and assessment
- 4:50 - 5:00** [Link to Individual daily checkpoint](#)

Wednesday June 23

- 8:30 - 9:00 Arrival, continental breakfast
- 9:00 - 9:55 Understanding our role as CS teacher
- 9:55 - 10:05 Break
- 10:05 - 12:20 Unit 2, U2L2, U2L3
- 12:20 - 1:20 Lunch (on your own)
- 1:20 - 2:20 Addressing Unconscious Bias
- 2:20 - 2:30 Break
- 2:30 - 4:50 U2L4, Unit 2 conclusions, Applying bias learning
- 4:50 - 5:00** [Link to Individual daily checkpoint](#)
- 5:00-6:00** [Distinguished Speaker Series: Beemon: Bee Monitor Research and Tools](#)
Dr. Rahman Tashakkori, Computer Science

Thursday June 24

8:30 - 9:00 Arrival, continental breakfast
9:00 - 10:05 Recruiting and Retaining
10:05 - 10:15 Break
10:15 - 12:20 Unit 3, U3L2, U3L4
12:20 - 1:20 Lunch (on your own)
1:20 - 2:20 U3L6
2:20 - 2:30 Break
2:30 - 4:50 U3L7, U3L8, Unit 3 conclusions, Personalization
4:50 - 5:00 [**Link to Individual daily checkpoint**](#)

Friday June 25

8:30 - 9:00 Arrival, continental breakfast
9:00 - 10:20 Equity, Values and Assessment
10:20 - 10:30 Break
10:30 - 12:20 Assessing Units 1-3, Tour of Code.org platform
12:20 - 1:20 Lunch (on your own)
1:20 - 2:40 AP scavenger hunt, Planning your year
2:40 - 2:50 Break
2:50 - 3:30 Closing ceremonies
3:30 - 3:45 Break
3:45 - 4:45 Retrospective and Overview of next two weeks
4:50 - 5:00 [**Link to Individual daily checkpoint**](#)

Daily Summaries

Week 3 - Deeper Dive into Code.org CSP Course

Monday June 28

- 8:30 - 9:00 Arrival, continental breakfast
- 9:00 - 10:15 [Challenges recruiting/engaging high school students with CS Webjets.io](#)
Ms. Jennifer LeBlanc, West Wilkes High
- 10:15-10:30 Morning Break
- 10:30 - 11:55 Vimeo: [K-12 Huddle: Solutions for K-12 CS: Let's Talk](#)
- 12:00 - 1:00 Lunch (on your own)
- 1:00 - 2:30 [Finishing our JavaScript Finale project](#)
- 2:30 - 2:40 Break
- 2:40 - 3:30 [Agile Software Development](#)
- 3:30 - 4:50 Sprint Planning: Content Deeper Dive
- 4:50 - 5:00** [Link to Individual daily checkpoint](#)

Tuesday June 29

- 8:30 - 9:00 Arrival, continental breakfast
- 9:00 - 10:15 [Deeper Dive: Data Representation](#)
- 10:15 - 10:30 Break
- 10:30 - 11:55 Course module deeper dive: "Sprint 1, Day 2"
- 12:00 - 1:00 Lunch (on your own)
- 1:00 - 2:30 [Deeper Dive: Programming Behind the Scenes](#)
- 2:30 - 2:40 Break
- 2:40 - 4:50 Course module deeper dive: "Spring 1, Day 4"
- 4:50 - 5:00** [Link to Individual daily checkpoint](#)

Wednesday June 30

- 8:30 - 9:00 Arrival, continental breakfast
Check this out for posters
<https://www.lessonhacker.com/posters/>
<https://code.org/educate/resources/posters>
- 9:00 - 10:15 Deeper Dive: Image Representation
- 10:15-10:30 Morning Break
- 10:30 - 11:55 Deeper Dive: Unit 6 (algorithms)
- 12:20 - 1:20 Lunch (on your own)
- 1:00 - 2:30 CS & CSP Landscape (NCCTE BP41, NCCTE BP42, BJC, Code.org, ECS, et al)
- 2:30 - 2:40 Break
- 2:40 - 4:50 Deeper Dive: Unit 7 (programming)
- 4:50 - 5:00** [Link to Individual daily checkpoint](#)

5:00-6:00 **Distinguished Speaker Series: The Math Behind Origami**
Dr. Noah William, Mathematical Sciences

Thursday July 1

8:30 - 9:00 Arrival, continental breakfast
9:00 - 10:15 Continued deeper dive
10:15 - 10:30 Break
10:30 - 11:55 Deeper Dive: Unit 8 (Performance Task)
12:00 - 1:00 Lunch (on your own)
1:00 - 2:30 Continued deeper dive
2:30 - 2:45 Break
2:45 - 4:50 Continued deeper dive
4:50 - 5:00 **[Link to Individual daily checkpoint](#)**

Friday July 2

8:30 - 9:00 Arrival, continental breakfast
9:00 - 10:15 CS Standards landscape ([CSTA](#), [NC CS Standards](#), [NC CTE BP41](#), [BP42](#))
10:15 - 10:30 Break
10:30 - 11:55 Deeper dive: Unit 9 (programming)
12:00 - 1:00 Lunch (on your own)
1:00 - 2:30 Continued deeper dive
2:30 - 2:45 Break
2:45 - 4:50 Continued deeper dive
4:50 - 5:00 **[Link to Individual daily checkpoint](#)**

Daily Summaries

Week 4 - Adapt to your local context

Monday July 5 **NO CLASS: Fourth of July Holiday**

Tuesday July 6

8:30 - 9:00 Arrival, continental breakfast
8:59 - 9:00 Sprint Goal: Friday Final Presentation - 3 Takeaways, 2 Commitments, 1 Mystery
9:00 - 10:15 Parallel and Distributed Computing Deep Dive
10:15 - 10:30 Break
10:30 - 12:00 Work on items for sprint goal
12:00 - 1:00 Lunch (on your own)
1:00 - 2:45 Work on items for sprint goal
2:45 - 3:00 Break
3:00 - 4:30 Data Visualization
4:50 - 5:00 [Link to Individual daily checkpoint](#)

Wednesday July 7

8:30 - 9:00 Arrival, continental breakfast
9:00 - 10:15 "The \$#%^@& We Put Up With"
10:15 - 10:30 Break
10:30 - 12:00 Work on sprint goal
12:00 - 1:00 Lunch (on your own)
1:00 - 5:00 Work on sprint goal
4:50 - 5:00 [Link to Individual daily checkpoint](#)
5:00-6:00 **Distinguished Speaker Series:Topic**
Dr. Baker Perry, Geography and Planning

Thursday July 8

8:30 - 9:00 Arrival, continental breakfast
9:00 - 12:00 Work on sprint goal
12:00 - 1:00 Lunch (on your own)
1:00 - 2:45 Work on sprint goal
2:45 - 3:00 Break
3:00 - 4:45 Cybersecurity
4:45 - 5:00 [Link to Individual daily checkpoint](#)

Friday July 9

8:30 - 9:00 Arrival, continental breakfast
9:00 - 11:30 Work on sprint goal
11:30 - 12:30 Lunch (on your own)
12:30 - 3:30 Final Presentations
3:30 - 4:50 Dinner & Graduation Ceremony - Neva Specht (Dean - College of Arts and Sciences)
4:50 - 5:00 [Link to Individual daily checkpoint](#) & [Link to self-efficacy post assessment](#)

Content Deeper Dive Topics

<ul style="list-style-type: none">👍 Data RepresentationImage Representation👍 Network Routing👍 More JavaScriptData VisualizationsCybersecurityMachine LearningArtificial IntelligencePrivacyEncryption	<ul style="list-style-type: none">👍 Agile Software Development👍 Programming: Behind the scenes👍 Searching, Sorting, Algorithm Analysis👍 Introduction to Parallel & Distributed Programming
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