K-State Advancing Learning & Teaching in Computer Science (ALT+CS) Lab is proud to host

The 3rd Computer Science Education for Kansas Conference CS4KS 2025





May

28-31, 2025

Kansas State University in Manhattan, KS. "For the educators growing computer science across Kansas,

your work is the root of lasting change"

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Josh Weese

Organizing Committee Members



David Allen



Safia Ma<mark>l</mark>allah

INTRODUCTION

We're thrilled to have you join us for four days of handson workshops, engaging sessions, and meaningful conversations focused on empowering educators like you to lead the future of computer science education in Kansas. Whether you're a CS teacher, a tech-savvy librarian, or a classroom teacher just beginning your computer science journey, this conference was designed with you in mind.



Our mission is to advance learning and teaching in computer science through creating educational resources and professional development for educators and students. **CS4KS** is a reflection of that mission, bringing together educators from across the state to share innovative strategies, explore new technologies, and build a strong, supportive CS education community.



Thank you for the energy, dedication, and care you bring to your work. We hope you leave CS4KS 2025 feeling inspired, equipped, and connected.

Our Journey to Support CS Education in Kansas

According to Code.org

- 35% of HS offer a foundational CS course [1]
- 38% of districts offer a foundational HS CS course [1]



Yes No

Until recently, many Kansas students completed high school with little to no exposure to computer science. In 2022, that began to change with new statewide expectations for all high schools to offer computer science courses.

At Kansas State University, we recognized the urgent need to support this transition—especially for rural schools and districts with limited resources. That's why our team at the ALT+CS Lab, in collaboration with the Center for STEAM Education and the Rural Education Center, launched the Cyber Pipeline program: a robust, no-cost open-licensed computer science curriculum paired with a state-funded professional development initiative to help Kansas teachers learn how to teach computer science confidently and effectively.

Through a newly developed graduate certificate in computer science education, teachers gain both foundational CS knowledge and the pedagogical skills to bring it into their classrooms. Since its inception, the Cyber Pipeline has trained over 100 educators, partnered with 104 school districts—60 of them rural—and reached thousands of Kansas students.

¹ https://advocacy.code.org/report-data/

We provide free curriculum, lesson plans, rubrics, and teaching tools to districts across the state, leveraging videos, e-textbooks, and interactive hands-on and automatically graded assignments, lowering the barrier for schools to launch CS programs. We are also building out a new undergraduate CS education certificate, laying the groundwork to graduate future educators from K-State who are already prepared to teach computer science on day one.

This mission is personal: many of us on the team come from small Kansas towns where opportunities in digital literacy and programming were limited or nonexistent. We believe that computer science is not just for tech hubs or urban schools—it's a powerful, future-ready skill that belongs in every Kansas classroom. With continued support from state grants, private donors, and the National Science Foundation, the Cyber Pipeline program is helping reshape what's possible for Kansas teachers and students alike.

The State of CS Education in Kansas

Computer Science (CS) is becoming a foundational part of education in Kansas, with schools, universities, and educational leaders working together to ensure that all students have access to high-quality CS instruction.

As of the 2023–2024 school year, 310 middle and high schools across 243 public school districts now offer at least one computer science course, reflecting the state's growing commitment to preparing students for a digital future. This expansion reaches students in rural, suburban, and urban communities alike.

A key driver of this progress has been professional development for teachers. In the past year, three organizations—Kansas State University, Wichita State University Tech, and ESSDACK—trained 108 educators through workshops and coaching programs. As a result, approximately 9,450 Kansas students are now learning computer science in the 2024–2025 school year.

These efforts highlight the transformative impact that well-supported teachers can have on student access and opportunity. By continuing to invest in CS education, Kansas is helping to ensure that every student can develop the critical thinking, creativity, and problem-solving skills needed to thrive in today's world.

¹ This report has been generated using data from the 2023-2024 fiscal and school years.

SCHEDULE AT A GLANCE

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WORKSHOP & SESSION DETAILS

Day 1

TITLE: OPENING CEREMONY

Date & Time: Wed 28th 9-9:15 am Session Type: Opening Ceremony Location: Lower Atrium





Description:

The Opening Ceremony welcomes all attendees and provides an overview of the conference goals, schedule, and key themes. This session marks the official start of the event and sets the stage for the sessions and activities to follow.

TITLE: BELONGING IS THE FIRST LINE OF CODE

Date & Time: Wed 28th 9:15-10:15 am Session Type: Keynote Location: DUE 0093





Before students learn syntax or build an app, they must feel like they belong in the room. In this keynote, Brianne Caplan shares her journey from feeling like an outsider in tech to building inclusive pathways for thousands of young people to create with code. You'll leave inspired to build classrooms where all students can see themselves as innovators – no computer science degree required.

TITLE: PROGRAMING CHATGPT FOR SMARTER CLASSROOMS

Date & Time: Wed 28th 10:15 -11:00 am

Session Type: Workshop Location: DUE 1114





Description:

This workshop introduces educators to ChatGPT's data analysis features and how they can be used to support student evaluation. Participants will learn how to upload and analyze class data — such as grades, assignment trends, and feedback — to make informed decisions and streamline their teaching workflow.

Note: You will need a ChatGPT account

TITLE: KANSAS STATE DEPARTMENT OF EDUCATION

Date & Time: Wed 28th 11:00 -11:30 am Session Type: Talk Location: DUE 1114

Description:

This session offers an overview of current KSDE initiatives around Computer

Science, including the requirements and impact of the Promoting Advancement in Computing Knowledge (PACK) Act, followed by a Q&A session where you can bring your Kansas computer science education questions.





TITLE: DATA IN ACTION!

Date & Time: Wed 28th 01-1:25 pm Session Type: Talk Location: DUE 1114





Description:

This session highlights how PREP-KC is introducing middle school students in Kansas City to the data science process through real-world, career-connected learning experiences. By partnering with schools, industry professionals, and higher education institutions, PREP-KC is helping students build valuable skills and gain early exposure to high-demand fields—empowering them to succeed in college and careers, regardless of their background.

TITLE: TOOLS OR TEMPTATIONS? A PERSONAL LOOK AT AI IN THE CLASSROOM

Date & Time: Wed 28th 01:25-1:50 pm Session Type: Talk Location: DUE 1114





Description:

This workshop highlights the use of AI in the classroom. What tools can help enhance student learning? Which AI tools are the "snake oil" of the 21st century?

TITLE: THE SCIENCE OF INTEGRATION: BUILDING INDUSTRY & EDUCATION PARTNERSHIPS

Date & Time: Wed 28th 1:50-2:15 pm Session Type: Talk Location: DUE 1114





Description:

This session explores how Kansas classrooms are evolving to meet the demands of the Information Age by integrating real-world, data-driven learning experiences. Beginning as early as fourth grade with initiatives like the Kansas KidWind Challenge, students engage in hands-on STEM activities that grow in complexity through middle and high school. Learn how statewide efforts and industry partnerships are equipping educators with tools to introduce data analytics, energy literacy, and AI skills—preparing students for future-ready careers.

TITLE: BREAKING DOWN SILOS & CREATING REAL-WORLD INTERACTIVE EXPERIENCES: AN INTRODUCTION TO ENERGY & DATA ANALYTICS

Date & Time: Wed 28th 2:15-3:00 pm Session Type: Workshop Location: DUE 1114





Description:

This hands-on session invites participants to explore energy and data analytics activities firsthand — just like students do in the classroom. Experience engaging tools, industry-based resources, and interactive experiments that bring STEM learning to life. The workshop also includes a discussion on shifting from content expert to learning facilitator, empowering students to take greater ownership of their educational journey. Participants will get an introduction to tools like Tableau Public and walk away with practical strategies for making science active, accessible, and student-driven.

TITLE: EXPLORING COMPUTATIONAL THINKING AND THE DATA SCIENCE PROCESS WITH CODAP

Date & Time: Wed 28th 3:00-4:00 pm Session Type: Workshop Location: DUE 1114



Jamie Provost Cecil Christwell



Description:

This workshop investigates parallels between Computational Thinking and The Data Science Process. Participants will also learn how to use Common Online Data Analysis Platform (CODAP) to help students develop data literacy skills in any content area.

Day 2

TITLE: TEACHING TOWARD THE FUTURE IN RURAL PLACES

Date & Time: Thu 29th 9:00 - 10:00 am Session Type: Keynote

Location: DUE 1114





Description:

How does teaching and learning in rural schools and our students'

connections to places matter to computer science teaching and learning? This talk will connect the concepts of place, place-based education, and rural spatial equity. The presentation invites teachers to see rural teaching as a project of social justice requiring advocacy to dismantle obstacles to participatory parity for rural students.

TITLE: FROM THE MARGINS TO THE MAINFRAME: RECLAIMING TECH FOR EVERY LEARNER

Date & Time: Thu 29th 10:00 - 11:30 am Session Type: Workshop Location: DUE 1114





Description:

Who gets to be a creator in the age of technology? Too often, our students are left on the sidelines of innovation. In this hands-on workshop, Brianne Caplan from Code Your Dreams shares how teachers in any subject can center creativity and belonging in tech education – no computer science background required. You'll explore approachable teaching strategies, try out remixable lesson ideas that spark joy and confidence in students, and walk away with free, ready-to-use resources that can be adapted to your classroom. Whether you teach art, math, history, English language arts, or science, this session will help you see yourself—and your students—as part of the movement to reclaim technology for all.

TITLE: COMPUTATIONAL CORE: TEACHING CS ONLINE

Date & Time: Thu 29th 11:30 – 12:00 Session Type: Talk Location: DUE 1114



Russ Feldhausen

Description:

Computational Core is a series of online computer programming courses offered by Kansas State University. Designed for students of any major, the program provides a strong foundation in programming and problem-solving skills that are valuable across a wide range of careers. Courses are self-paced, mastery-based, and supported by teaching faculty and assistants, combining flexibility with personalized support. The first six courses form the Computer Science Certificate, which can be completed on its own or alongside any K-State degree.

TITLE: CS FOR ELEMENTARY LEARNERS

Date & Time: Thu 29th 01:00 – 02:00 pm Session Type: Talk Location: DUE 1117





COMPUTATIONAL

Description:

This session provides an overview of how computer science can be

introduced at the elementary level. It will cover basic concepts, age-appropriate activities, and tools that support early learning. The goal is to help students build a foundation in problem-solving and logical thinking through simple and practical approaches.

TITLE: CS FOR MIDDLE SCHOOL LEARNERS

Date & Time: Thu 29th 01:00 – 02:00 pm Session Type: Talk Location: DUE 1116





Description:

This session focuses on practical ways to introduce computer science to middle school students. It will cover key concepts, engaging activities, and tools that help build foundational skills in programming, problem-solving, and computational thinking. The goal is to support student learning through age-appropriate, accessible approaches that prepare them for more advanced CS topics in high school.

TITLE: CS FOR HIGH SCHOOL LEARNERS

Date & Time: Thu 29th 01:00 – 02:00 pm Session Type: Talk Location: DUE 1114





Description:

This session provides an overview of approaches and resources for teaching computer science at the high school level. It will cover foundational and advanced topics, highlight tools and platforms commonly used in high school CS courses, and discuss how to support students as they build skills for college and career pathways in computing. The session is designed to help educators deliver effective, relevant, and engaging CS instruction for high school students.

TITLE: SUNDERLAND INNOVATION LAB TOUR

Date & Time: Thu 29th 02:00 – 04:00 pm Session Type: Tour Location: Hale Library





Description

Description:

Participants will be walking together to Hale Library for a guided tour of the Sunderland Innovation Lab and its creative technology spaces. The tour concludes with two short talks introducing the Makerspace and 3D printing resources available at K-State. Attendees will also have the opportunity to try 3D printing and learn how to access these free tools for future projects.

Day 3

TITLE: WHY RURAL MATTERS

Date & Time: Fri 30th 09:00 – 09:30 am Session Type: Workshop Location: DUE 1114





This session provides an overview of the current landscape of rural education, with a focus on key issues and opportunities relevant to

Kansas. Participants will explore data and themes from the Why Rural Matters report, including educational equity, access to resources, and student support. The session is intended to inform and frame ongoing conversations about the importance of rural communities in shaping the future of education.

TITLE: STEM CAREER AWARENESS

Date & Time: Fri 30th 09:30 – 10:00 am Session Type: Talk Location: DUE 1114

Description:

This session focuses on fostering awareness of career opportunities in

STEM. Attendees will explore approaches to introduce STEM careers, helping learners make connections between their interests and future possibilities.

TITLE: MINECRAFT TO STL CONVERTER

Date & Time: Fri 30th 10:00 – 10:30 am Session Type: Talk Location: DUE 1114

Description:

Coming Soon

TITLE: CREATE AN AI CHATBOT

Date & Time: Fri 30th 10:30 – 11:30 am Session Type: Workshop Location: DUE 1116





Description:

Participants will use block-based programming tools to create a simple AI chatbot that simulates a conversation with Albert Einstein. The activity introduces key concepts in chatbot design and artificial intelligence, offering a hands-on way to explore how AI can be used for creative and educational purposes.





Lindsay Schmidt



TITLE: BUILDING AN AUGMENTED REALITY PIANO

Date & Time: Fri 30th 10:30 – 11:30 am Session Type: Workshop Location: DUE 1117





Description:

Participants will build an interactive augmented reality (AR) piano using 3D modeling and block-based coding tools. They will design the piano, program its behavior, and then test it on their own mobile devices.

TITLE: CODING WITH MAKEY MAKEY

Date & Time: Fri 30th 10:30 – 11:30 am Session Type: Workshop Location: DUE 1114





Description:

This session introduces participants to coding with Scratch and Makey Makey. Using block-based programming, participants will learn how to connect everyday objects to their computer and turn them into interactive tools that trigger sounds and actions.

TITLE: BEOCAT TOUR

Date & Time: Thu 29th 11:30 – 11:45 am Session Type: Tour Location: Engineering Hall





Description:

This tour introduces attendees to Beocat, Kansas State University's high-performance computing cluster. Participants will learn how Beocat supports advanced research through powerful, shared computing resources. Attendees will also gain insight into the practical challenges of running a supercomputer and the trade-offs between speed, reliability, and energy use. This visit provides context for topics like data-intensive computing, AI, and scientific modeling.

PG. 21

TITLE: CHATGPT IN CS EDUCATION

Date & Time: Fri 30th 01:00 – 02:00 pm Session Type: Panel Location: SAS





Description:

This panel explores the use of ChatGPT in computer science education, focusing on both the opportunities and challenges it presents. Panelists will discuss classroom integration, academic integrity concerns, regulatory considerations, and practical strategies for effective use. The session will highlight real-world experiences, address emerging policies, and invite open discussion on how to support students while maintaining ethical and pedagogical standards.

TITLE: GAME DESIGN

Date & Time: Fri 30th 02:00–03:30 pm Session Type: Workshop Location: DUE 1116





Description:

This session introduces key concepts in game design. Participants will explore what makes games engaging and then apply those ideas in a hands-on project to create their own simple game.

TITLE: EXPLORING COMPUTER SCIENCE THROUGH UNPLUGGED ACTIVITIES

Date & Time: Fri 30th 02:00–03:30 pm Session Type: Workshop Location: DUE 1117





Description:

This session introduces a variety of hands-on, screen-free activities that

teach core computer science concepts. The workshop offers practical examples that can be used in classrooms, libraries, or after-school programs—no devices required.

TITLE: WEB DEVELOPMENT

Date & Time: Fri 30th 02:00–03:30 pm Session Type: Workshop Location: DUE 1114





Description:

This session introduces the fundamentals of web development. Participants will engage in a handson activity to create a simple web page and explore how content, layout, and interactivity work together. The session is designed for beginners and focuses on practical skills that can be applied in classroom projects or personal learning.

TITLE: A FUN WAY TO TEACH COMPUTATIONAL THINKING AND PROBLEM SOLVING

Date & Time: Fri 30th 03:30 – 04:00 pm

Session Type: Talk Location: SAS



Description:

Looking for an engaging way to integrate computational thinking into your classroom? Taskmaster a British comedy game show where contestants solve quirky challenges—provides the perfect model. In my computer science class, students design their own Taskmaster-style challenges for classmates, promoting problem-solving, creativity, and computational thinking skills. In this session, you'll learn how to create your own Taskmaster-inspired tasks to engage your students. As part of the EDCI 765 course, you and your group will complete a Taskmaster challenge and submit your solution as part of Module 2: Work Together.

Day 4

TITLE: CS+X CURRICULUM DEVELOPMENT

Date & Time: Sat 31st 09:00–10:00 am Session Type: Workshop Location: DUE 1116





Description:

This session explores strategies for developing interdisciplinary computer

science curricula—combining CS with other subject areas such as art, science, social studies, and more. Attendees will learn how to design CS+X learning experiences that align with standards, foster creativity, and connect coding with real-world contexts. The session will include examples, design tips, and resources to support implementation in diverse educational settings.

TITLE: TEACHER CIRCLE: EXPERIENCES THAT EMPOWER

Date & Time: Fri 30th 10:00 – 11:00 am

Session Type: Panel Location: SAS

Description:

This panel brings together returning educators who have previously participated in the program to share their experiences, challenges, and successes. Designed to support new participants, the discussion will highlight practical advice, helpful strategies, and personal insights on implementing computer science in the classroom. Attendees will gain a better understanding of what to expect and how to make the most of their learning journey.

TITLE: WHAT NEXT AFTER THE CERTIFICATE

Date & Time: Fri 30th 12:00 – 01:00 pm Session Type: Panel Location: SAS





Description:

This panel will guide educators through the next steps after earning their computer science teaching certificate. Panelists will outline a range of options, including advanced coursework, involvement in local or national CS initiatives, and pathways to endorsement or graduate study. The session will help participants understand how to build on their certificate experience and continue growing as CS educators.

TITLE: OPEN HOUSE

Date & Time: Sat 31st 01:00–02:30 pm Session Type: Open House Location: Atrium



Description

The Open House is a casual, come-and-go event where participants can visit different stations, view displays, and learn more about ongoing projects, programs, and opportunities. It's a chance to ask questions, explore resources, and connect with presenters in an informal setting.

SPEAKER, PANELIST & COLLABORATOR BIOS

The Speaker, Panelist & Collaborator Bios section highlights the diverse group of individuals contributing their expertise to this year's conference. This section provides a glimpse into their backgrounds, helping attendees connect faces to names and better appreciate the wealth of knowledge shared throughout the event.

DR. SCOTT DELOACH

Professor and Outgoing Department Head, Computer Science, Kansas State University



Dr. Scott DeLoach is a professor and the outgoing Department Head of Computer Science at Kansas State University. He holds a B.S. in Computer Engineering from Iowa State University and M.S. and Ph.D. degrees in Computer Engineering from the Air Force Institute of Technology. A 20-year veteran of the United States Air Force, Dr. DeLoach served in multiple roles across

intelligence, research, and academia before joining K-State in 2001. His research focuses on software engineering for intelligent, adaptive, and distributed systems, with current work in smart grids, intelligent power systems, and adaptive network security. Dr. DeLoach has published over 100 scholarly works and has been cited more than 5,400 times. He is a recipient of the NSF CAREER Award and several K-State honors, including the Outstanding Department Head Award.

DR. DANIEL ANDRESEN

Professor and Incoming Department Head, Computer Science, Kansas State University



Dr. Daniel Andresen is the newly appointed Department Head and a Professor of Computer Science at Kansas State University. He holds a Ph.D. in Computer Science from UC Santa Barbara and has served on the K-State faculty since 1997. As director of the Institute for Computational Research, his work spans distributed systems, high performance computing, and interdisciplinary collaboration across agriculture, engineering, and the sciences. A recipient of

the NSF CAREER award, Dr. Andresen has led over 20 major grants and continues to advance research and education in computing at both state and national levels.

CECIL CHRISTWELL

Director of Teaching and Learning - PREP-KC



Cecil Christwell is the Director of Teaching and Learning at PREP-KC, where he leads the organization's Data Science Initiative to support middle school data science education. He holds a Bachelor's degree in Computer Science and a Master's in Secondary Education. Cecil brings over 16 years of experience in the Kansas City Kansas Public Schools, where he served as a high school math teacher, building administrator, and district athletic

director.

DR. NATHAN BEAN

Teaching Assistant Professor, Computer Science, Kansas State University



Dr. Nathan Bean is a Teaching Assistant Professor and Richard B. and Mary Jo Myers Cornerstone Teaching Scholar at Kansas State University. He holds a Ph.D. in Curriculum and Instruction with a focus on Computer Science Education. With a background in both software development and education, Dr. Bean co-directs the ALT+CS Lab where his research explores the use of simulations, games, and innovative pedagogy in computing education. He is

also actively involved in teacher preparation and curriculum development to support K–12 computer science education.

JEFF SHELDON

Director of the Sunderland Foundation Innovation Lab



Jeff Sheldon is the director of the Sunderland Foundation Innovation Lab, a makerspace and creative learning environment in Kansas State University's Hale Library. He supports hands-on learning and interdisciplinary collaboration by providing students, faculty, staff, and the broader community access to enabling technologies that help bring new ideas to life.

BRIANNE CAPLAN

Founder & Executive Director – Code Your Dreams



Brianne Caplan is a visionary leader in technology education and a former data scientist who, after witnessing firsthand the harms of a tech sector lacking diversity, made it her mission to ensure that everyone can belong and thrive within it. In 2018, she founded Code Your Dreams, a global nonprofit that provides community-centered computer science education to students from starting as early as kindergarten. A graduate of the University of Chicago, Bri has been featured in media outlets such as Forbes and the Chicago Tribune, honored by Crain's for her leadership in STEM, and is the author of the children's book Techie Tales. Through her

innovative programs and passionate advocacy, she is redefining tech education to build a more inclusive, empowering, and equitable future.

STEPHEN H. KING

STEM Program Manager at Kansas State Department of Education



Stephen H. King is the STEM Program Manager at the Kansas State Department of Education, bringing over two decades of experience in education, IT, and academic leadership. A PMP-certified professional and former U.S. Army Infantry Officer, he has held numerous leadership roles across higher education institutions and state education agencies. His work focuses on developing STEM professional development, building educator

capacity, and supporting statewide curriculum and assessment initiatives. Known for his strategic mindset and commitment to innovation, King continues to advance STEM education through collaborative, outcomes-driven programs.

DR. KAREN EPPLEY

Associate Teaching Professor of Education, Penn State University



A former rural K-12 student and rural fifth-grade teacher in Northern Appalachia, as of fall 2025, Karen Eppley is an Associate Professor of Rural Education at Kansas State University where she directs the Rural Education Center. Her research agenda explores the ways in which opportunity does not manifest equally across space and asks questions about teaching and learning at the intersection of placed-identities, rural education, and policy.

She is a co-author of Why Rural Matters (2023 & 2025), Teaching in Rural Places: Thriving in Classrooms, Schools, and Communities and a co-editor of the Bloomsbury Handbook of Rural Education in the United States.

DR. CAMILLA ROBERTS

Director of the Honor and Integrity System at Kansas State University



Dr. Camilla is the Director of the Honor and Integrity System at Kansas State University. In this position she oversees both the education of academic integrity to the K-State Community as well as the adjudication of alleged violations. Camilla has been active in the International Center for Academic Integrity since 2008 when she made the transition to academic integrity from working several years in university housing. Since 2016, she has served on

the leadership board of ICAI. She served as Vice President (March 2018-March 2020) where she focused mainly on membership recruitment and planning conference planning and served as President of ICAI (March 2020-March 2024). She transitioned to President Emeritus in March 2024. Camilla has a BA (2001) in Psychology and an M.Ed. (2004) in Counselor Education from Clemson University as well as a Ph.D. (2008) in Higher Education Administration from Kansas State University. With her counseling and student affairs background, she strives to help students understand academic integrity as a "big picture" in terms of ethics and moral development and not something that they will only see while at a university.

JONATHAN LANE

Technology Innovation Manager at PREP-KC



Jonathan Lane combines over a decade of experience in software development and STEM education to build transformative AI tools for the classroom. As Technology Innovation Manager at PREP-KC, he has led the development of platforms like DataDeck and I Need Help, blending full-stack engineering with pedagogical innovation. Jonathan is a frequent speaker on AI and ethics in education and brings a passion for making complex technologies accessible and equitable for students and educators alike.

JAMIE PROVOST

Data Science Teaching and Learning Coach



Jamie is an experienced professional in the field of education, dedicated to making a positive impact on students' lives. With a diverse background that includes roles as a mathematics teacher, instructional coach, and curriculum developer, she brings a comprehensive understanding of effective teaching strategies and educational best practices. Her commitment to fostering a love of learning — especially in mathematics — is evident through her work designing engaging curricula, leading impactful professional development sessions, and

providing unwavering support for the growth of fellow educators. Jamie has served in rural, suburban, and urban settings and currently works as a data science teaching and learning coach in the Kansas City metro area. In this role, she partners with teachers across districts to implement curriculum that introduces students to data literacy, data science, and the pervasive role of data across all career fields.

DAN WHISLER

Educator in Residence for Trane



Dan Whisler is the Educator in Residence for Trane, working with school districts across the Midwest to lead the BTU CrewTM Energy & Data Analytics Program. Prior to this position he taught Biology, Chemistry, Anatomy & Physiology, and Environmental Science at Sterling (KS) High School for 33 years. Dan's resume includes presenting at state, regional and national events such as the Kansas Wind and Renewable Energy Conference, the Kansas Energy Expo, the National Science Teachers Association Regional Conference in Kansas City, the NSTA National

STEM Conference in New Orleans, and the NSTA National Conference in Chicago. Dan received the 2011 Outstanding Secondary Science Teacher Award presented by the Kansas State University Chapter of Sigma Xi and has been featured in GM's "New Roads" magazine for his students' work with the SHS Chevy Volt Project. Sterling's "SHS Chevy Volt Project" was selected for the 2015 National Outstanding Energy Engineering & Design Project by The National Energy



Education Development (NEED) Project in Washington D.C. Dan is a member of the Kansas Governor's Council on Education, serving as a co-chair on the Future Ready committee and working to bring students more opportunities for career exploration and training. Dan was inducted into the Kansas Teachers Hall of Fame in 2023.

RUSSELL FELDHAUSEN

Instructor, Computer Science, Kansas State University



Russell Feldhausen is an instructor in the Department of Computer Science at Kansas State University and a Kevin and Jacquie Elmore Cornerstone Teaching Scholar. He holds both a B.S. and M.S. in Computer Science from K-State and is currently pursuing a Ph.D. with a focus on computer science education. His work centers on curriculum development for online and hybrid programs, and his research has been published in top CS education venues.

Russell is also deeply involved in outreach, supporting STEM education through programs like 4-H Discovery Days and KAWSE GROW.

DR. SAFIA MALALLAH

Teaching Assistant Professor, Computer Science, Kansas State University



Dr. Safia Malallah is a teaching assistant professor at Kansas State University, where she completed her Ph.D. in Computer Science. Her research is dedicated to advancing computer science and data science education across the PreK-12 and undergraduate levels. Dr. Malallah is particularly passionate about designing innovative and accessible learning experiences that cultivate essential computational skills in students

PAUL M. GIAMMARCO

PhD student in Curriculum and Instruction, Kansas State University

Paul M. Giammarco is a third-year PhD student in Curriculum and Instruction at Kansas State University. He has eight years of experience teaching high school mathematics and computer science in Albany, NY, and also teaches Business Math at Siena College in Loudonville, NY. Paul holds a Master's in Adolescent Education: Mathematics from SUNY Buffalo and a BA in Mathematics from SUNY Buffalo State University. His research focuses on teaching computational thinking, problem solving, and project-based learning. Drawing from his graduate studies, Paul designed two project-based electives: Exploring Computer Science and Mathematics and Sports, which serve as the foundation for his dissertation research.

OKONODA MICHAEL

PhD Student, Computer Science, Kansas State University



Okonoda Michael Eseoghene is pursuing a Ph.D. in Computer Science at Kansas State University. He has over a decade of experience in the banking industry, specializing in digital innovation and IT infrastructure for financial payment systems. He has worked on several projects using data science and machine learning for customer behavior analysis, improving digital banking solutions for

customer satisfaction. He holds a master's degree in Information Technology and a bachelor's degree in computer science from Ladoke Akintola University of Technology and the University of Benin, Nigeria, respectively. His research interest is in the application of Data Science and Machine Learning methodology in the analysis of biomedical images, and also for financial transactions pattern recognition for fraud detection. Michael's current research is on Convolutional Neural Networks and their biases in Biomedical Images.

DR. LIOR SHAMIR

Professor, Computer Science, Kansas State University



Dr. Lior Shamir is a Professor of Computer Science at Kansas State University. He holds a Ph.D. in Computational Science and Engineering from Michigan Technological University, and has a background in both academia and industry, including postdoctoral work at the NIH and experience as a CTO. His research in data science spans machine learning, computational statistics, and interdisciplinary applications—from astronomy and medicine to art and psychology. Dr. Shamir has authored nearly 150 peer-reviewed

publications and serves on the steering committee of the Midwest Big Data Hub.

DR. JOSH WEESE

Teaching Assistant Professor, Computer Science, Kansas State University



Dr. Josh Weese is a Teaching Assistant Professor in the Department of Computer Science at Kansas State University and a Kevin and Jacquie Elmore – Carl and Mary Ice Cornerstone Teaching Scholar. He holds a Ph.D. in Computer Science from K-State, with expertise in computer science education, data science, and K–12 STEM outreach. His work focuses on curriculum development, computational thinking, and assessment design for K–12 learners. Dr. Weese has led numerous outreach initiatives

impacting thousands of students and currently mentors both the ACM student chapter and Diversity in Computing group at K-State.

LINDSAY SCHMIDT

Executive Director of RAISE Kansas



Lindsay Schmidt is originally from Iuka, Kansas. She works as a Physician Assistant in Orthopedic Surgery and is also the Executive Director of RAISE Kansas (previously STEMM FIRE). RAISE is an independent initiative of Fort Hays State and a nonprofit focused on increasing STEMM career exposure and exploration for rural students across Kansas. As a rural alumna, she is passionate about providing resources to rural students and teachers along with building collaborations that work to strengthen the rural workforce.

She currently resides in Shawnee, Kansas with her husband and 3 daughters.

DR. VAISHALI SHARDA

Associate Professor, Biological and Agricultural Engineering, Kansas State University



Dr. Vaishali Sharda is an Associate Professor and Steve Hsu Keystone Research Scholar in the Department of Biological and Agricultural Engineering at Kansas State University. She holds a Ph.D. in Biosystems Engineering from Auburn University. Her research focuses on sustainable agriculture, agro-hydrologic modeling, and the dynamics of food-energywater systems. Dr. Sharda integrates climate data and decision support tools to enhance water resource management and crop productivity, with

applications spanning the U.S. Southeast to the Great Plains.

DR. PASCAL HITZLER

University Distinguished Professor, Computer Science, Kansas State University - Director, Center for Artificial Intelligence and Data Science



Dr. Pascal Hitzler is a University Distinguished Professor and the Lloyd T. Smith Creativity in Engineering Chair at Kansas State University. He directs both the Institute for Digital Agriculture and Advanced Analytics (ID₃A) and the Center for Artificial Intelligence and Data Science (CAIDS). A leading researcher in semantic web, neurosymbolic AI, and knowledge representation, he has authored over 400 publications and is the founding editor-in-chief of the Semantic Web Journal. Dr. Hitzler holds a Ph.D. in

Mathematics from the National University of Ireland, Cork.

DR. DAVID S. ALLEN

Associate Professor, Department of Curriculum and Instruction, Kansas State University - Director, Center for STEAM Education



Dr. Allen is an Associate Professor and Director of the Center for STEAM Education at Kansas State University. A mathematics educator by training, he has shifted his focus to computer science education, developing several graduate and undergraduate courses on the subject. His research centers on delivering high-quality professional development in math and science education, with a particular interest in the integration of technology in teaching and learning. Dr. Allen primarily teaches graduatelevel mathematics education courses.

ELIZABETH PARKES

Assistant Director, K-State Career Center



Elizabeth Parkes is the Assistant Director at the K-State Career Center, where she serves as the Career Engagement Consultant for the Carl R. Ice College of Engineering. With a background in strategic communications and a passion for student success, she supports Wildcat Engineers in becoming career-ready through advising, programming, and employer engagement. A proud K-State alumna and former Air Force ROTC cadet, Elizabeth brings a blend of leadership, communication, and student development experience to her role.

JADA CONLEY

Educator



Jada Conley has been an elementary teacher for 28 years, all in USD380 Vermillion, 26 at Centralia Schools. She received her BS in Elementary Education from KSU (97), and Masters in Instructional Technology from FHSU (23). She has been part of the Cyber Pipeline program since January 2024. She is also LETRS certified and has been a member of both a literacy and math leaders cadre. Additionally, she is a longtime member of her District Leadership Team, PDC, and a member of the Accreditation Advisory Council

(AAC) with KSDE. This year she will also begin her 26th year as dance coach of the Centralia Panther Dancers. Jada enjoys books, music, and crochet. She loves to travel and spend time with her family.

JEFF YEAROUT

Educator and Technology Teacher



Jeff Yearout is a dedicated educator and technology teacher with over thirty years of experience in education. He holds degrees from Wichita State University, the University of South Florida, and Pittsburg State University, along with additional graduate coursework at Kansas State University. Since 2016, Jeff has served as the computer science teacher at Derby High School. In August 2025, he will begin a new role as the Lead IT Teacher for Wichita Public Schools, based at the Future Ready Center on the campus of

WSU Tech – South. Jeff is an active member of CSTA and CSTA Kansas, and currently serves as a training facilitator for Code.org's CS Discoveries curriculum. From 2013 to 2023, he was a PLTW Master Teacher and Core Training Instructor. He is also a longtime presenter at the MACE Conference at Kansas State University and regularly attends computer science education conferences at both regional and national levels. Outside the classroom, Jeff enjoys golf, traveling with his family, and pursuing his lifelong passion for music. He is an active performer with the Delano Jazz Orchestra in Wichita, Kansas.

LOGISTICS

PARKING

- Hotel Parking: Guests staying at the conference hotel have access to free parking. Walking from the hotel to/from the conference venue is highly encouraged for those staying there.
- K-State Parking Garage: Day permits are available for \$6. K-State Parking Permits
- ParkMobile App: Parking is available in various lots around the Engineering Building using the <u>ParkMobile app</u> (For speakers driving to the conference location, reimbursement will be provided for this option.)
- Street Parking: Street parking is also available near campus.

MEALS

- We have coffee and snacks available in the morning break,
- Lunch is provided each day—check the schedule for exact times.
- Full Breakfast is provided through the hotel for hotel guests.
- Dinner is on your own Local restaurant recommendations:
 - Baan Thai (Thai)
 - Nico's Little Italy (Italian)
 - Green Tea Sushi (Japanese)
 - Ana's Burger Shack (American)
 - Taco Lucha (Mexican)

STIPENDS AND REIMBURSEMENT

NOTE: STIPENDS ARE AVAILABLE ONLY FOR CYBER PIPELINE PACK GRANT PARTICIPANTS (BOTH CURRENT AND PAST).

- PACK Participants will receive a total stipend of \$900, distributed as \$225 per day for each day of participation at the conference.
- Attendance will be taken daily at the registration table—this is required to confirm your participation, process your payment, and issue your professional development certificate
- Stipend payment will be issued after the conference, once all required forms have been submitted.
- To receive your stipend or reimbursement, please carefully follow the instructions below:

- W-9 Form: please complete and SIGN this form. Only Page 1 is needed, and it must be signed.
- <u>Secure Website</u>: either upload it before here, or bring a printed copy with you.
- You can also do this at the registration table for speakers and panelists.

PROFESSIONAL DEVELOPMENT POINTS (PDPS)

To be eligible for Professional Development Points (PDPs), educators must attend at least one workshop session during the conference. Attendance will be recorded, and qualifying participants will receive: (1) a Certificate of Attendance and (2) this conference catalog. You may submit these documents to your school district for PDP approval, as each district has its own process. If you need more information about PDPs or have any questions, please contact Dr. Safia Malallah at <u>safia@ksu.edu</u>.

CONFERENCE HOTEL:

- Hotel Name: Courtyard Manhattan Aggieville Discounted group rate is available at the Courtyard Manhattan Aggieville for CS4KS attendees. Space is limited, so early booking is recommended.
- Discount Code : CST or CSTA Conference
- The discounted rate is available only until May 12, 2025. Please make your reservation before this date to secure the reduced rate.
- Booking Dates : May 27-30, 2025
- Location : 715 N 12th St, Manhattan, KS 66502
- **Distance** : Walking distance to/from the conference venue is approximately 10–12 minutes
- Contact Number : (785) 587-1972
- Free parking available
- On the final day of the conference (May 31, 2025), a designated room at the conference will be available for participants to securely store luggage throughout the day.

Note: Attendees are free to choose their own accommodation. The following nearby hotels are also available (not part of the discounted group rate):

- Parkwood Inn & Suites
- Holiday Inn
- Bluemont Hotel

MAPS

See below for helpful maps of the K-State Campus and the Engineering complex.

K-State Campus Click Here for the Interactive Map

Helpful Addresses:

- Conference Hotel: 715 N 12th St, Manhattan, KS 66502
- Engineering Complex: 1701D Platt St, Manhattan, KS 66506

Engineering Hall - Main Floor





SPONSORS



CS4KS 2026

On behalf of the organizing team, thank you for being part of this year's event. Your energy, insights, and collaboration made it a success!

We're excited to announce that our next conference will be held in May 2026. If you're interested in joining the organizing team or becoming a sponsor, we'd love to hear from you! Contact us: altcslab@ksu.edu

We can't wait to see you again in 2026!

— The ALT+CS Lab Team