Dr. Christopher Stewart, a project co-lead on the ICICLE Smart Cyberinfrastructure for Digital Agriculture (SCIDA), visited the AIFARMS AI Institute in March and delivered an invited lecture. Dr. Stewart spoke about the products coming out of the SCIDA project including data preparation tools, like high-performance image stitching and the automatic image labeling service, high-performance model training software, and cloud-to-edge inference using the whole computing continuum.

Dr. Stewart met with Vikram Adve and other leaders in AIFARMS to discuss possible collaborations. Asked about the trip, Dr. Stewart said, "The drive was so easy. I can't believe we haven't done this before. I hope we can frequently in the future."

ICICLE & AIIRA SIGN MOU TO STRENGTHEN COLLABORATION

NSF and USDA AI Institutes for AI Institute for Resilient Agriculture (AIIRA) and Intelligent Cyberinfrastructure with Computational Learning in the Environment (ICICLE) sign MOU to strengthen collaboration.

ICICLE is developing end-to-end training solutions for large amounts of agricultural image and multi-modal data collected by AIIRA. Collaboration details available here.
READ ABOUT ICICLE IN THE AI MAGAZINE SPECIAL ISSUE

“Creating intelligent cyberinfrastructure for democratizing AI” published in the IEEE AI Magazine, provides an overview of the activities taking place in the NSF-AI Institute (ICICLE) to design the next-generation intelligent cyberinfrastructure for computing continuum environments and to democratize AI.

ICICLE DISCUSSES TEACHER PROFESSIONAL DEVELOPMENT WITH SCHOOL BUSINESS ADVISORY COUNCIL IN OHIO

“How is AI Shaping the World and what do the schools need to know regarding teacher professional development activities?”

In conversation with the School Business Advisory Council and business leaders in Richland, Crawford and Morrow Counties in Ohio, Dhabaleswar K. (DK) Panda & Raghu Machiraju provided an overview of the NSF-AI Institute ICICLE along with the various outreach, education and BPC efforts being carried out by the Institute and the implications for the current and future workforce.

(Download presentation)
Final reports by the class of 2023 Educational Fellows — Ashish Hingle, Brandon Alston, Chinasad T. Okolo, Collin Lucken, and Tim Elmo Feiten available online.

The 2023 program theme was about democratizing artificial intelligence and making it more accessible to a wider range of potential users. Throughout their fellowship, they worked closely with Julie Wernert who managed the program. They engaged with their ICICLE mentors, conducted one-on-one interviews with ICICLE members and presented their work at the ICICLE all-hands meeting.

“We loved working with these amazing scholars who brought much to the ICICLE Institute” said Dr. Beth Plale, ICICLE Co-PI.

Ashish Hingle, presented an extension of his project at ACM SIGCSE and placed second in the Graduate Research Competition. Congratulations Ashish!!
Middle schoolers descended upon Ohio State University on March 2nd for a day packed with coding excitement at Code I/O. At the heart of this event were ICICLE team members Carlos Guzman and Swathi Vallabhajosyula (ICICLE NextGens Community leader), showcasing the transformative power of Edge devices in scientific workflows.

The interaction with ICICLE’s Animal Ecology AI model was a standout moment, sparking intriguing questions and conversations. As participants pondered, “Are there actually humans?”, they were inspired to explore the boundless possibilities of coding and innovation. This event left a lasting impression on all who attended, igniting a passion for technology, and paving the way for a new generation of tech enthusiasts.
ICICLE TIPS ON AI ETHICS

A series of short videos that situates AI Ethics in an accessible, tip-oriented manner. The series is motivated by the belief that *forethought about ethical implications can create better outcomes*. Check out the tips listed below -

- **TIP #1**: REMEMBER THAT AI IS NOT INEVITABLE.
- **TIP #2**: RECOGNIZE THAT OUR RESPONSIBILITY IS TO THE POSITIVE OUTCOMES WE WORK TOWARDS
- **TIP #3**: DIMENSIONS OF PRIVACY
- **TIP #4**: FAIRNESS – FOCUS ON STAKEHOLDERS AND USE-INSPIRED SCIENCE
- **TIP #5**: TRUSTWORTHINESS – WHAT DOES IT TAKE TO TRUST AI AND CYBERINFRASTRUCTURE?
- **TIP #6**: ACCOUNTABILITY – PROVIDES MECHANISMS FOR EVALUATING TRUSTWORTHINESS
- **TIP #7**: AI DEMOCRATIZATION IN ICICLE

Browse all Tips for AI Ethics [here](#)

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ICICLE TIPS ON ALLYSHIP

The Broader Impact Backbone Network team has created tips in video format on how we, here at ICICLE, can become better allies TO PROMOTE AN AWARE, INCLUSIVE, AND MORE DIVERSE COMMUNITY

Browse all Tips for Allyship [here](#)

• Yamei Tu, Rui Qiu, Han-Wei Shen, "KG-PRE-view: Democratizing a TVCG Knowledge Graph through Visual Explorations", April 2024


• Christopher Stewart, “Unlocking Planetary Digital Agriculture Transformation Using Intelligent CyberInfrastructure With Computational Learning in the Environment (ICICLE) “, AIFARMS SPRING24 SEMINAR SERIES, March 2024

• Dhabaleswar K. (DK) Panda and Raghu Machiraju, "How AI is Shaping the World, Overview of the Activities at the NSF-AI Institute ICICLE, and Possible Engagement", Invited Presentation at the Business Advisory Council and School Superintendents Meeting, Bucyrus, Ohio, February 2024.

• Marty Kandes, Ph.D., Near and Far-Field Data Distribution for ICICLE: Intelligent CyberInfrastructure with Computational Learning in the Environment, 4th National Science Data Fabric All-Hands Meeting, February 2024.

• Luke Waltz, Drones and Data in Agriculture, 2024 Corn College and Soybean School Extension Webinar for the Battle for the Belt, February 2024.

• Hari Subramoni, HARVEST: High-Performance Artificial Vision Framework for Expert Labeling using Semi-Supervised Training, Translational AI Center (TrAC) Seminar at Iowa State University, January 2024.

Click here to view all ICICLE Presentations and Publications
The following mailing lists are available for ICICLE software and cyberinfrastructure releases, future updates and miscellaneous questions regarding installation/build problems, performance issues.

- **icicle-announce**: This is an announcement list only. If you would like to get information about future updates, software and cyberinfrastructure releases, publications, etc. related to the ICICLE project, you may subscribe to this mailing list. This list is open to public. You are welcome to subscribe to this mailing list yourself.

- **icicle-discuss**: This is a discussion list. This mailing list is meant for users to discuss all installation/build problems, performance issues, features and other miscellaneous questions related to the different software and cyberinfrastructure components of the ICICLE project. In order to post your questions and suggestions to this mailing list, you need to be a registered user of ICICLE with an organizational e-mail address and be a member of this list by subscribing to it with the same e-mail address. If you are not a registered user, please follow the procedure indicated under Download tab in the top menu to get registered.

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