

# SC Competes/Palmetto AI Corridor: Artificial Intelligence Rapid Innovation Lab Findings

Facilitator: Dr. Lucas Layman, Research Scientist, Fraunhofer USA

## Proposed AI-Enabled Visions for the Future

*AI Space Station* – An AI collaboration space, virtual and/or physical, where SC community partners approach problems/opportunities that may be solvable using AI and using AI as a driver for public good. models in use; however, they tend to be used in more siloed applications, *i.e.*, medicine, education. ([Idea Receiving Most Votes](#))

*abundAInce: holistic education through AI* – Smart robots to help with K-12 education that also provide mental health guidance.

*Here's looking at you kid: a girl and her robot* – Similar to *abundAInce* but focusing on emotional intelligence and social awareness to help educators and caregivers guide students through healthy development.

*Climate Smart Farming* – AI-based genomic prediction to assist in producing high-yield, resilient crop strains. These new strains are piloted in HBCU R&D consortiums before distribution to regional farmers.

*Healthcare Where I Am* – AI helps predict patient needs. These predictions are used to schedule a mobile health center that targets rural communities and/or isolated individuals who cannot easily travel to a health care provider.

*The Carbon Father. AI-enabled energy savings* – Utility companies deploy network connected thermostats. AI identifies opportunities for energy efficiency projects using this data. Utility companies incentivize customers to participate in the energy efficiency projects.

*Sensitive Streets*: Sensors on the street collect data from passing vehicles and the environment for predictive modeling/AI to eliminate challenges and create opportunities.

## Educational Institution Collaboration Brainstorming

SCFUSA desires to fund more projects with public/educational institutions

SCFUSA looking to match federal \$, and not just industry \$

Clemson – Forestry + collaboration with UPenn in AI (ideal harvesting, precision, and optimization)

Fraunhofer USA – Practical applications of this would be great (paper industry)

The Citadel – Working to build an AI Innovation Center, Recruitment of students from Trident Technical College

SCFUSA – Dedicated \$ available for student involvement in projects through Fraunhofer Scholars, with or without a faculty advisor

The Citadel – Graduate experience and funding from school, alone, is not enough. Proposed \$3k from school and \$3k from SCFUSA for summer research projects.

SCFUSA – Needs to be a good fit as far as the project, but several instances of this type of collaboration with SCFUSA funds.

The Citadel – Cybersecurity is in the Citadel's School of Math & Science; very interested in expanding faculty involvement.

Trident Technical College – Exposure to pathways and possibilities is important. Many students enter wanting to be an engineer and fail to make it through the technical college training to transfer for a degree.

Trident Technical College – AI curriculum needs to be taught in K-12. Once a student decides to go to school to be an engineer, for example, they are not where they need to be to be.

The Citadel – Looking to do an AI Camp. They have curriculum to the camp and want to make it scalable, appealing to females and minorities.

State of SC – Model schools/curriculum to mimic what students will experience on the job through automation.

Fraunhofer USA – Automation is a ripe area in education. Difficult to implement, but there are certainly opportunities.

The Citadel – Developing AI coursework to upskill workers. Certified with MGAC – could be a resource for the state (online and in-person offerings)

Clemson – Need interactive and innovative education with industry alignment

SC Department of Administration – Target students where AI could be injected for beneficial educational outcomes

Fraunhofer USA – Both education using AI and education about AI; need to find need for both

The Citadel – Idea to produce a hackathon-style program dealing with the supply chain and AI exposure, engaging students including HBCU and high school students; potential partnership with APL Logistics

Fraunhofer USA – This could be pitched straight to Amazon for a dialectical interpretation by Alexa with search engine discrimination.

SCFUSA – One main goal of this discussion was to connect all of the educational institutions and revisit the ideas presented at the next SCFUSA review board meeting to come up with a cohesive, collaborative plan.

## Attendees

(Participating &  
Observing Entities)

South Carolina  
Council on  
Competitiveness

ADoH Scientific  
BMW  
BrightMa Farms  
The Citadel  
Clemson University  
Fraunhofer USA  
Heron Farms  
Hank.AI  
Medical University  
of South Carolina  
South Carolina  
Department of  
Administration  
South Carolina  
Department of  
Commerce  
South Carolina  
Department of  
Employment and  
Workforce  
South Carolina  
Research Authority  
Trident Technical  
College  
University of South  
Carolina