

# Center for Community-Engaged Artificial Intelligence and the Connolly Alexander Institute for Data Science launch summer research program

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The Center for Community-Engaged Artificial Intelligence ([CEAI](#)) at Tulane University, in partnership with the Connolly Alexander Institute for Data Science ([CAIDS](#)), established the Community-Engaged Artificial Intelligence and Data Science Summer Research Program. This innovative program aims to foster research into human-centered artificial intelligence (AI) with a focus on social impact, emphasizing the

importance of building meaningful relationships with diverse communities throughout the AI lifecycle.

The Community-Engaged AI and Data Science Summer Research Program supports research into how AI technologies are developed and deployed in ways that are socially beneficial, inclusive, effective, fair, transparent and accountable. By involving communities in all stages of the AI process — from design through deployment — the program seeks to create AI solutions that address real-world challenges and promote equity.

This summer, the program awarded funds to support three groundbreaking research projects, each receiving \$10,000 to advance their work:

### **1. LandmarkAI: Recognizing Real Estate Development Threats to Unregistered National Historic Landmarks**

- **PI: Fallon Aidoo**, assistant professor of Real Estate & Historic Preservation, Tulane University, School of Architecture
- **Project Overview:** This project tests the effectiveness and ethics of AI enhancements to text recognition and table analysis software. The project uses emergent AI tools to identify ethnic heritage unregistered as national historic landmarks, and real estate development threats to their preservation. To do so, the project develops a not-so-large language model from property records collected with the African American Heritage Trail of Martha's Vineyard, a public history nonprofit, and architectural records archived by the Martha's Vineyard Camp Meeting Association, a land trust. By evaluating and advancing AI tools that are affordable and accessible to community-based organizations, the team aims to guide community-driven preservation of ethnic heritage.

### **2. Chocó Forest Watch: Supporting Local Conservation in a Biodiversity Hotspot**

- **PI: Jordan Karubian**, professor, Tulane University, Department of Ecology & Evolutionary Biology, School of Science and Engineering
- **Project Overview:** This initiative leverages AI to aid local conservation efforts in one of the world's most biodiverse areas, enhancing the protection of critical ecosystems. The project will co-develop a localized forest monitoring system called Chocó Forest Watch with Fundación para la Conservación de los Andes Tropicales ([FCAT](#)), an Ecuadorian grassroots NGO that manages a community-

run reserve in the highly threatened Chocó rainforests of Ecuador. Through a human-centered design approach that engages local community members, the project will create a user-friendly, low-cost and locally adapted tool that supports FCAT to monitor and respond to deforestation. This project will also contribute to the [TIERA](#) (Tulane Interdisciplinary Environmental Research and Action) program's student- and faculty-led research projects in Ecuador.

### **3. Transforming a Traditional Evidence-Based Intervention: AI-Enhanced Support for Young Adults With Substance Use Disorders**

- **PI: Audrey Hang Hai**, assistant professor, Tulane University, School of Social Work
- **Project Overview:** This research seeks to integrate AI into existing interventions to provide enhanced support for young adults struggling with substance use disorders, aiming to improve outcomes and accessibility. Partnering with the CADA Prevention & Recovery Center, the team will conduct focus groups to assess attitudes towards the use of AI to help guide individuals to available resources to deal with substance use disorders.

"We are excited to support these innovative projects that exemplify the potential of AI and data science to address societal challenges," said Dr. Aron Culotta, director of CEAI. "By engaging communities directly in the research process, the goal is to develop AI solutions that are not only technologically advanced but also socially responsible and impactful."

The Community-Engaged AI and Data Science Summer Research Program represents a significant step toward creating AI technologies that are deeply attuned to the needs and values of diverse communities. CEAI and CAIDS are committed to continuing this important work and fostering a collaborative environment where technology and society co-evolve for the betterment of all.

For more information about the program and the funded projects, visit [CEAI](#) and [CAIDS](#).

#### **About CEAI**

The Center for Community-Engaged Artificial Intelligence (CEAI), funded by Tulane's Office of Research, is dedicated to promoting the development and deployment of artificial intelligence technologies that are inclusive, equitable, and socially

beneficial. CEAI focuses on integrating community engagement into AI research to ensure that technological advancements serve the public good.

### **About CAIDS**

The Connolly Alexander Institute for Data Science (CAIDS) at Tulane University is dedicated to cultivating a comprehensive understanding of data science concepts and methodologies among the Tulane community. By fostering data literacy, CAIDS aims to empower individuals to tackle real-world challenges and drive innovation in the data-driven landscape.