Title of the NASA STTR award: Augmented Intelligence and Cognitive Support Ecosystem (AICSE)

Fayetteville State University is the only HBCU which has been selected for the NASA 2021 STTR Program Phase I award as a Research Institution partnering with STEM Resources, a minority-owned Small Business. NASA selected 289 small businesses and 47 research institutions to receive the Phase I funding this year¹. Of the 47 research universities that were funded, 19% are Minority Serving Institutions². The project, entitled Augmented Intelligence and Cognitive Support Ecosystem (AICSE) will design a new type of Artificial Intelligence (AI) digital companion that enhances the capability of scholars and researchers in examining research topics and data. Modern scientific discovery is driven by Big Data which consists of result from experiments and simulations, and manuscripts written about these discoveries. With ever-growing scientific publications that span multiple areas of knowledge and increasingly data-driven nature of scientific discovery, the digital companion designed by AICSE will provide the basic framework for software needed by the scientific community.

The project will be collaborative effort between Drs. Jessie Walker, BCEO, Mohiuddin Hasan/researcher at STEM Resources, Dr. Sambit Bhattacharya⁴, Professor of Computer Science at FSU and Director of the Intelligent Systems Lab (ISL)³. The research is a technical feasibility study that will examine a new type of knowledge mining and support services. In addition, the project team hopes that the work within this project will form a foundation for possible commercial applications for smart artificial agents designed to provide mentoring services that connect diverse resources, such as social service benefits, employment assistance, education/job training, housing, mental, behavioral/ physical services, substance abuse treatment.

- [1] https://www.nasa.gov/press-release/nasa-provides-45m-boost-to-us-small-businesses
- [2] https://sbir.nasa.gov/award_ri_list/selection_nid/66869
- [3] https://www.uncfsu.edu/academics/colleges-schools-and-departments/college-of-health-science-and-technology/department-of-mathematics-and-computer-science/intelligent-systems-laboratory

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