Center for Applied Data Science (CADS) 2020-2021 Faculty Adopter Award Solicitation
Application Deadline: January 15, 2021

Overview

The Center for Applied Data Science (CADS) at WSSU is an institution-wide initiative to foster research and education in data-driven knowledge discovery. CADS aims to bring together computer scientists and domain scientists with complex data science problems to promote and accelerate data-intensive discovery and education. The center received its inaugural funding of 1.5M in the Fall of 2020 for three years funded by the UNC Research Opportunities Initiative (ROI). More information about CADS's mission, goals, and research projects can be found on the CADS website.

One of the center's objectives is to facilitate gradual infusion of data science literacy at the various level of instructions across various disciplines at WSSU. The **Faculty Adopter Awards** are designed to support enthusiastic WSSU faculty who are willing to infuse data science into their courses across various disciplines and are capable of quantitatively and qualitatively assess the impact of their interventions. CADS center will support necessary training to a group of selected faculties who will then develop contextual course modules, assessments, and projects and perform in-class deployment of the modules.

General Information

Eligibility: Full-time faculty from any department at WSSU interested in data analysis, big data management, machine learning, etc., are encouraged to apply.
Award Amount: **$4,000** stipend will be paid in one installment at the end of the 2020-2021 academic year.
Number of Awards: Up to **Five** proposals will be awarded.
Implementation Period: Spring, 2021(February-May 2021)
Application Deadline: January 15, 2021
Award Notification: January 22, 2021
Contact: Debzani Deb, debd@wssu.edu

Proposal Submission Guidelines

A successful proposal will clearly outline a plan to infuse data science into the curricula. The proposed curriculum infusion must be completed within the funding timeline. As part of this award, the faculty are expected to develop data science modules to be integrated into their courses that span through a week or two during the semester. The proposal should be concise, to the point, be limited to 4 pages, and contain the following sections.

1. Details of the course where you plan to infuse data science, including the following information
    1. Course Name
    2. Course Number
    3. Course Level
    4. Offering Department
    5. Semester offered
    6. Which majors typically take the course
    7. Typical enrollment
    8. Major Learning Outcomes of the course
    9. How long have you been teaching this course?
    10. Please attach a current syllabus along with the proposal.
2. Specify the additional learning outcomes that you are hoping that your students will achieve after the proposed modular intervention.

3. Outline of the general plan of work, the broad design of activities to be undertaken to design the course module and its components such as lesson plan, lecture, handouts, exam, quiz, etc.
4. The course module must have a project/assignment built into it where students will receive hands-on experience in data analysis. Outline your plan to implement this hands-on component and, if possible, specify a few potential data sets along with some prospective questions that you will like your students to explore based on these datasets.
5. Include a brief assessment plan - how will you know if your students attained the proposed learning outcomes?
6. Include brief dissemination and sustainability plan – How will you propagate the study results (local seminar, conference presentations, peer-reviewed journal articles, grant submissions, etc.)? How will you sustain the intervention in the following semesters?
7. Proposed timeline with activities.

Visit our Faculty Adopters website to see past adopters and the developed course modules.

Proposals are due by 11:59 p.m., January 15, 2021 and can be emailed to cads@wssu.edu. Please include in the subject line: 2020-2021 CADS Faculty Adopter Award. Late proposals cannot be accepted.

Proposal Evaluation Criteria

Proposals will be reviewed and assessed by the CADS director and faculty fellows based on the following evaluation rubric and weights:
1. Clarity: The data science specific student learning outcomes are stated clearly, and the proposed intervention and assessment plans are valid ways to address the learning outcomes. (50 points)
2. Hands-on Project: The proposal outlines the plan for the project/assignment component supported by available/collected data. (20 points)
3. Novelty: The proposal contains innovative plans to motivate students in learning data science concepts. (10 points)
4. Feasibility: The proposed activities are feasible to achieve within the proposed timeline. (10 points)
5. Dissemination and Sustainability: The proposal contains a clear and convincing plan for the dissemination and sustainability of the proposed intervention. (10 points)

Award Obligations and Opportunities

o The awardees will work through the Spring 2021 semester (February 2021 to May 2021) to develop the course module, execute it in the classroom, collect and analyze student assessment data, and disseminate the module and the study results.
o The awardees must attend a mandatory training session during the last week of January 2021 and attend regular meetings with CADS personnel during the project period.
o At the end of the project, the awardees must submit module contents, raw student performance, and survey data (de-identified) along with a narrative of instructor's perspective to the CADS director.
o The awardees will present their results in a CADS symposium. The date and format of the presentation will be communicated later.
o CADS graduate research assistants will assist the awardee during the in-class deployment of the module.
o Additional funding may be available to support student research assistants and their travels to professional conferences.