UTSA.

The University of Texas at San Antonio™

DATE:
Friday,
January 28, 2022

TIME:
12:00pm-1:30pm CST

LOCATION:
Zoom: 921 8560 9255

RESEARCH SEMINAR SERIES

CAMEE

NASA MIRO CAMEE

CENTER FOR ADVANCED MEASUREMENTS IN EXTREME ENVIRONMENTS
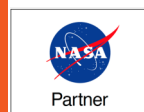
PRESENTS:

David Chambers, Southwest Research Institute

Title: *Deep Learning and Differentiable Physics*

Abstract:
In this seminar, I will share insights into the factors that have driven the deep learning revolution and talk about some exciting new developments that promise to bridge modern artificial intelligence with a myriad of other fields, such as optimal control theory and computational fluid dynamics. Through the application of algorithmic differentiation to physics-based forward modeling, recent advancements have offered performance improvements of 100x-1000x over previous methods for solving inverse problems. In addition to an overview of recent work, I will provide a small set of examples in different domains and discuss future challenges.

Phone:
(210) 458-4924

Fax:
(210) 458-4469

Email: camee@utsa.edu

Website:
www.utsa.edu/NASA-CAMEE/