Generative AI and Deep Learning with MATLAB: A Visual Approach

Co-sponsored by University of Arizona Libraries and UITS Research Computing

When: Thursday, November 14, 11:30-1:00pm

Location: Main Library B252/254, CATalyst Learning Studios

Registration Link: https://libcal.library.arizona.edu/calendar/events/matlab

Generative AI is now utilized across various fields, ranging from education to industry. Integrating it into your workflows can enhance productivity. In this workshop, we will explore some MathWorks tools that can integrate Generative AI.

Deep learning is quickly becoming embedded in everyday applications and it will soon be essential for students and educators to adopt this technology to solve complex real-world problems. MATLAB and Simulink provide a flexible and powerful platform to develop and automate AI, deep learning, data analysis, and simulation workflows. In this workshop we will introduce deep learning with MATLAB by utilizing a previously trained network and modifying it with MATLAB Deep Network Designer. The Deep Network Designer allows you to interactively build, visualize, and train neural networks. Individuals will be able to generate the code for neural networks and finetune parameters.

Users can use popular pre-trained networks or construct their own. We will also look at the MATLAB Classification Learner to run several models on a single data set. These visual approaches allow users to create a more efficient workflow.

Jon Loftin, Presenter

Jon Loftin is a Customer Success Engineer at MathWorks and a Texas Tech Alumni. Jon's background is in mathematics. More specifically, implementing mathematics in a computer. He holds degrees in mathematics: a BS from Southern Arkansas University, an MS from the University of Arkansas, and a Ph.D. from Texas Tech University. He has had years of teaching experience, from teaching at the Naval Nuclear Power School to teaching as an Assistant Professor. Jon's research focus is building efficient integration techniques in finite element methods.