



Introduction to AI and Machine Learning in Cyber Security

UWF Florida Cybersecurity Training Program
Offered by the University of West Florida Center for Cybersecurity

Course Overview

Course Dates: April 15 - 26, 2024

Duration: 14 days

Instructional Hours: 15 contact hours

Delivery Format: Asynchronous online (courses)

Target Audience: Courses: IT and Cybersecurity practitioners or staff;

Required Prerequisites / Background: Students from any background is welcome, some prior knowledge of Cyber Security and coding useful but not essential;

CEUs: 1.5, **CPEs:** 18

Course Instructor(s):

Instructor	Email
Dr. Hossain Shahriar	hshahriar@uwf.edu

Course Description

As Artificial Intelligence is being used in our daily activities, it is imperative to be aware of their capabilities and applications to address existing and emerging cybersecurity threats. This course will provide an introduction of Artificial intelligence. It will cover the basics of cybersecurity threats, machine learning and how practical applications are developed using real world datasets to address cybersecurity related problems. The course will be using hands on practices using Google Colab environment where learners will be practicing how machine learning applications are developed, tested and evaluated. This course uses a combination of lecture, discussion, labs, in an asynchronous online instruction modality via Zoom.

NIST NICE Cybersecurity Workforce Framework Mapping

Cybersecurity Work Roles and Categories:

- Data analyst (Operate and Maintain, OM-DTA-002)
- Vulnerability Assessment Analyst (Protect and Defend, PR-VAM-001)
- Cyber Defense Infrastructure Support Specialist (Protect and Defend, PR-INF-001)