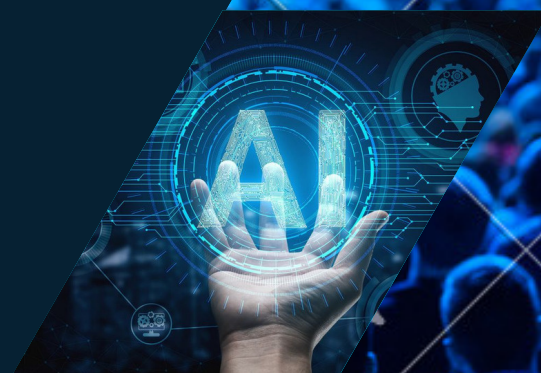


VIRTUAL INTENSIVE TRAINING: HANDS-ON WITH ARTIFICIAL INTELLIGENCE ALGORITHMS, FRAMEWORKS AND TOOLS

VITH-AI 2022

AI Concepts & Workflows
Machine Learning,
Deep Learning



TRAINING OBJECTIVE

Artificial Intelligence is extending its frontiers in almost every domain of cybersecurity. Cybersecurity solutions can be made more intelligent and advanced with data-driven models. VITH-AI will introduce participants to implement AI algorithms in Python using AI frameworks. The participants will learn to develop AI models for use cases of cyber security. The participants can gain familiarity to train models on GPUs.

TRAINING OUTLINE

- Introduction to AI, Machine Learning and Deep Learning
- Introduction to SETS High Performance Computer-ParamSpoothi
- Introduction to AI in Cybersecurity
- Building supervised and unsupervised models
- Training on AI framework using Jupyter Notebook
- Implementation of AI algorithms
- Distributed training across multiple GPUs
- CyberSecurity tools using AI



 Keras



**29-30
SEPTEMBER
2022**

SETS WILL PROVIDE

- Access to SETS High Performance Computing infrastructure for 5 days
- Course material
- Sample data-set for hands-on
- Certificate of participation

FEE

₹ 4720/-
(inclusive of taxes)

REGISTRATION:

setsindia.in/vithai2022

M SWATHI MITHRAN

7020401814

Website: setsindia.in

ABOUT SETS

Society for Electronic Transactions and Security (SETS) is a premier Research Institution under the O/o the PSA to the Govt. of India. SETS performs R&D in the area of Cryptology and Computing, Hardware Security, Network Security and Quantum Security to meet the Nation's cybersecurity needs.

TRAINING SCHEDULE

Day 1

Session 1	Introduction to AI, Machine Learning, Deep Learning and AI Frameworks: Tensorflow, Keras, Pytorch
Session 2	Introduction to applications of AI in Cybersecurity
Session 3	Build and Train Logistic Regression and Linear Regression Model in Tensorflow
Session 4	Build and Train a K Nearest Neighbour (KNN) and K Means Model in Keras
Session 5	Build and Train Support Vector Machine (SVM) and Naive Bayes Model in Pytorch
Session 6	AI based Cybersecurity Tools - Part 1

Day 2

Session 1	Build and Train Decision Tree in Tensorflow
Session 2	Build and Train a Convolutional Neural Network (CNN) in TensorFlow
Session 3	Build and Train a Recurrent Neural Network (RNN) in Keras
Session 4	Build and Train Long Short Term Memory (LSTM) Neural Network in Pytorch
Session 5	Build and Train Private Aggregation of Teacher Ensembles (PATE) in Tensorflow
Session 6	AI based Cybersecurity Tools - Part 2

PAYMENT DETAILS

Name: Society for Electronic Transactions and Security

Bank Name: Indian Bank

Bank IFSC Code : IDIB000L006

Bank Account Number: 430969098

Note: Please submit the payment reference number during the registration process



**SOCIETY FOR ELECTRONIC TRANSACTIONS AND SECURITY
(SETS)**