Welcome to ineuron.ai

DevOps Master

Description:

This course is specifically created to help you master many areas of software development, operations, continuous integration, continuous delivery, automated build, test, and deployment. You will learn DevOps tools such as Git, Jenkins, Docker, Ansible, Kubernetes, and more. This will teach you how to design Continuous Integration (CI) and Continuous Delivery (CD) pipelines to deliver applications to various environments such as testing, staging, and production.

Start Date:

Doubt Clear Time:

Course Time:

Features:

Challenges

Quizzes

Assignments

Downloadable Resources

What we learn:

Linux

Git

Docker

Kubernetes

Openshift

Ansible

Terraform

Requirements:

Prior Knowledge of Linux & Bash Scripting will be helpful

A system with a decent internet connection

Dedication

Instructor:

Name:

Sunny Bhaveen Chandra

Description:

Sr. Data Scientist and lecturer at iNeuron.ai with working experience in computer vision, natural language processing and embedded systems. Hands-on experience leveraging machine learning, deep learning, transfer learning models to solve challenging business problems. Also, he has a vast interest in Robotics.

Name:

Sourangshu Pal

Description:

Visual Computing Engineer and instructor at iNeuron.ai having 3 years of diverse experience in the discipline of visual computing with specialization in Deep Learning and Computer Graphics. Loves to analyze, process, and model visual data then interpret the insights to create actionable plans for solving challenging business problems.

Name:

Ritesh Yadav

Description:

Ritesh is truly passionate about data science, machine learning and DevOps in general, he likes what he does, and is keen to learn. Currently, He is working as a Jr. Data Scientist at Ineuron.ai.He also loves to Contribute to Open Source Projects, which are mainly under CNCF Landscape. Ritesh loves to work in Cloud-Native technologies and Golang (Go).Apart from this, Ritesh has been actively involved in the open-source community for over a year, helping many open-source DevOps tools and CNCF Projects like Porter, Meshery, Keptn, TensorFlow, and Thanos through his contributions.

>Linux:

>>Introduction to Linux

>>What is Linux

>>Important Pieces in Linux

>>Features of Linux

>>Evolution of Linux

>>Differences between Windows and Linux

>>Downloading necessary tools

>>Installing Ubuntu in Windows

>>What is SSH?

>>Install SSH clients

>>Setting up SSH in Ubuntu VM

>>How to do SSH to your Ubuntu VM?

>>Setting Up passwordless SSH

>>What is Kernel

>>Types of Kernel

>>What is Shell

>>Types of Shell

>>Distros in Linux

>>Linux Boot Process

>>File System

>>Run Levels in Linux

>>File types of Linux

>>Package Mangement

>>Package Mangers & DPKG

>>Working with APT & APT GET

>>Apt-get Advanced Part 1

>>Apt-get Advanced Part 2

>>Linux Commands Part1

>>Linux Commands Part2

>>Linux Commands Part3

>>Linux Commands Part4

>>cat command usages

>>File Archival

>>File Compression

>>Files and Patterns Search

>>Input Output Redirection

>>Working with Vi Editor

>>Advanced Vi Editor Part 1

>>Advanced Vi Editor Part 2

>>Types of Account in Linux

>>User Management

>>Group Management

>>Files Access Controls

>>Linux File Permissions

>>Modifying File Ownership

>>Sudoers in Linux

>>Cronjobs

>>SCP

>>Special Permissions

>>System Management

>>System tools

>>Hard link and Soft link

>>Aliasing in Linux

>>Creating users in Multiple ways

>>Launching an Ubuntu VM and SSH Setup

>>Package installation in VM

>>Running our Calculator App

>>Gunicorn & Nginx Setup

>>Creating a Gunicorn Service

>>Attaching an Elastic IP

>>Attaching OpenSSL Certificates for https

>Git:

>>Git Introduction

>>What is Version Control?

>>Types of Version Control

>>What is Git?

>>Why Git?

>>Git Installation in Windows

>>Git Installation in Linux

>>Git Setup

>>Git Terminologies

>>Repositories in GIT

>>Creating Repository

>>Checking Repository History

>>Doing Commits

>>git diff

>>git restore

>>gitignore

>>Tagging

>>Branching

>>Branching Practicals

>>Merging

>>Merge Conflicts

>>Remote repository

>>Cloning Repository

>>Working with Remote Repository

>>Pushing to Remote Failed in Github

>>Personal Access Token Setup in Windows

>>Personal Access Token Setup in Linux

>>Pull Request

>>git Fetch & Pull

>>Fork

>>Rebasing

>>Interactive Rebasing

>>Git Rewrite History

>>Git Rewrite History continued

>>Cherry Picking

>>Modify Recent Commits

>>Git Revert

>Docker:

>>Docker Introduction

>>What is Docker?

>>Why Docker?

>>Benefits of Docker

>>What is Container?

>>Containers vs VM

>>Containers vs Image

>>Docker Editions

>>What Docker is not?

>>Important Terminologies

>>Docker Setup in Windows

>>Docker Setup in Linux

>>Docker Setup in Mac

>>Docker Basic Commands part 1

>>Docker Basic Commands part 2

>>Docker Run Part 1

>>Docker Run Part 2

>>Docker Images

>>Creating a new image

>>Environment variables

>>Commands & Entrypoints

>>Docker Compose

>>Voting Application Understanding

>>Docker Compose Versions

>>Docker Compose Networks

>>Voting Application with Docker Run

>>Voting Application with Docker Compose

>Kubernetes :

>>What is Kubernetes ?

>>Introduction to Kubernetes

>>Kubernetes Architechture

>>Install minikube and kubectl

>>Components

>>ConfigMap & Secret

>>Volumes

>>Deployment & StatefulSet

>>Change the pod/deployment configuration

>>What is a Namespace?

>Ansible:

>>What is Ansible?

>>Getting Started with Ansible

>>Ansible Components

>>Ansible Concepts

>>Ansible Controller Node Setup

>Openshift:

>>Openshift on AWS and Openshift CMD

>>Openshift

>>OpenShift Vs Kubernetes

>Terraform:

>>Course Requirements

>>What is Terraform and IaC

>>Terraform Workspaces

>>Terraform Variables, Input and Output

>>Terraform TfVars and Autovars

>>Terraform State and Statefiles

>>Terraform Providers

>>Terraform Commands

>>More on Terraform Commands

>>Launch EC2 using Terraform

>>Installing Terraform CLI

>>Installing AWS CLI

>DevOps Hybrid Pipeline Project:

>>Introduction to DevOps Pipelines & its Tools

>GCP Pipeline project:

>>Problem Statement

>>Requirement Gathering and Analysis