Curriculum

LIVE
Recording available

Day 1
Foundations and Core Concepts

Module 1: Introduction to Edge Computing
- Overview of edge computing concepts
- Differences between edge, fog, and cloud computing
- Importance of edge computing in modern applications

Module 2: Basics of Deep Learning
- Introduction to deep learning: concepts and techniques
- Overview of neural networks and their applications
- Role of deep learning in edge computing

Module 3: Edge Computing Architecture and Platforms
- Key components of edge computing: devices, gateways, and servers
- Edge computing platforms and tools: AWS Greengrass, Azure IoT Edge
- Data processing and analytics at the edge

LEARNING OUTCOME

The key learnings for Day 1 are:

1. Core concepts and importance of edge computing.
2. Differences between edge, fog, and cloud computing.
3. Basics of deep learning and its role in edge computing.
4. Key components and architecture of edge computing.
5. Introduction to edge computing platforms and tools.

Day 2
Advanced Techniques and Practical Implementation

Module 4: Hands-on Deep Learning with U-Net Based Architecture
- Introduction to U-Net architecture for image segmentation
- Building and training a U-Net model
- Deploying U-Net on edge devices for real-time processing

Module 5: Transfer Learning
- Understanding transfer learning and its importance
- Applying transfer learning techniques in edge computing scenarios
- Fine-tuning pre-trained models for specific edge applications

Module 6: Model Pruning for Edge Computing
- Introduction to model pruning and its benefits
- Techniques for pruning deep learning models
- Implementing model pruning to optimize edge deployments

Conclusion and Project Work
- Recap of key learnings
- Hands-on project: Integrating deep learning models with edge computing
- Q&A and final discussion on future trends in edge computing

LEARNING OUTCOME

By the end of Day 2, participants will be able to:

1. Define spectral signatures and their importance in remote sensing.
2. Analyze spectral reflectance curves for material identification.
3. Apply practical techniques for identifying materials using spectral signatures.
4. Implement advanced image processing methods for data enhancement.
5. Utilize feature extraction and classification techniques for land cover analysis using spectral data.

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ENROLL NOW

Got any more questions? Feel free to contact us on
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