Orientation programme
of
Project Based Industrial Training
on
Blockchain, IoT and Machine Learning using Python

Jointly offered by
NIELIT Guwahati & CIT Kokrajhar

20 July 2022

Why this internship?

- Hands-on practical learning
- Structured learning for implementation of project ideas.
- Work on emerging technologies.
- Get industrial exposure.
- Get familiar with academic research domains

Focused area

- **Blockchain Technology**
  - Education and IT industry
- **IoT**
  - Agriculture
  - Wildlife
  - Smart cities
  - Green energy
- **Machine Learning**
  - Medical & Health care

Internship timeline

Bootcamp

Rigorous learning on said domains

Hands-on Session

Practical implementation of the topics discussed in the Bootcamp

Expert Talks

Special sessions on emerging area by industry expert and academician

Project Showcase

Demonstration of the B.Tech., M.Tech. final year projects and PhD research project

Project assignment & Implementation

Project will be assigned to interns based on their area of interest

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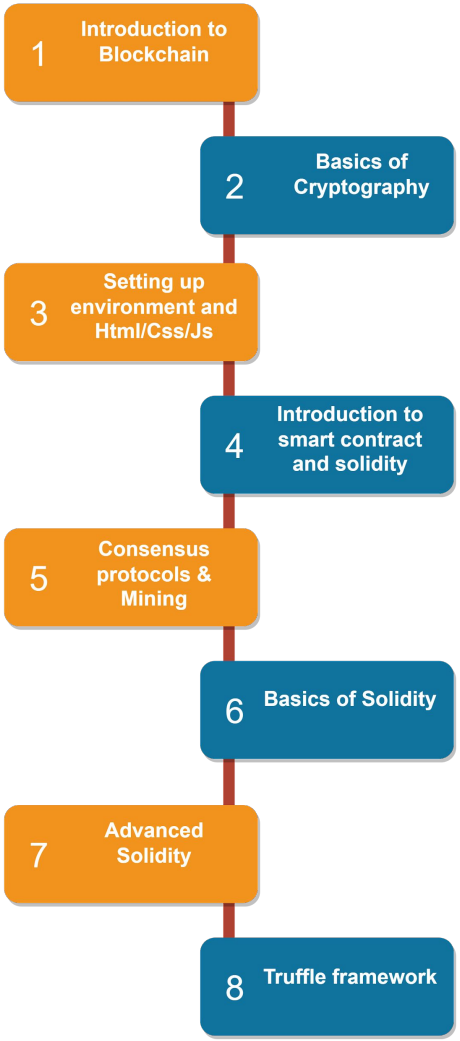
Blockchain Learning Path



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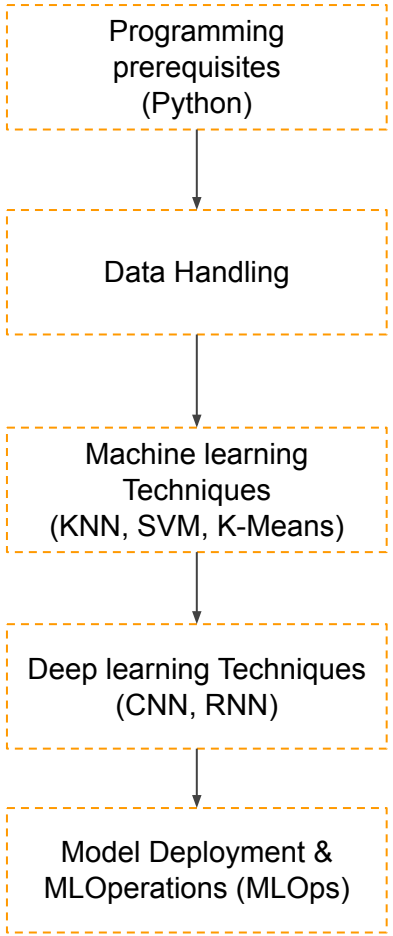
Future Scope of Blockchain

- Sectors
  - Cyber Security
  - HealthCare
  - Education
  - Agriculture
- National / International
- Startups
- Research and Development (R&D)

Machine Learning Path



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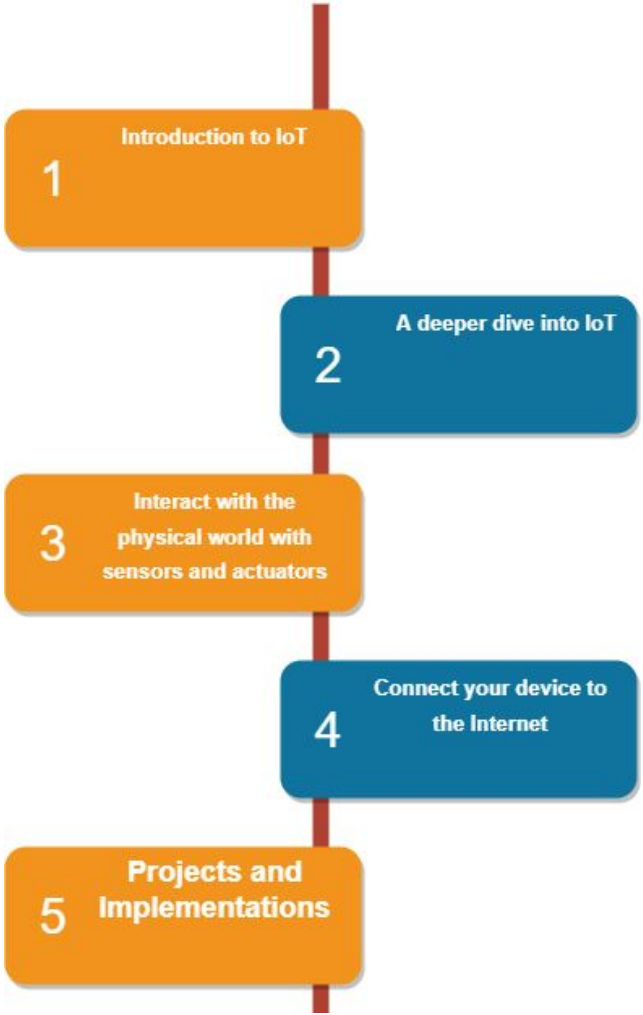
Future Scope of Machine Learning

- Industry (All sectors)
- Academic Research
- R&D in Industry
- Majority of companies have R&D lab in India
- Emergence of TinyML

IoT Learning Path



Learning Resources

- NPTEL
  - "*Blockchain and its application*" by Prof Sandip Chakraborty and Prof. Shmik Sural, IIT KGP.
  - "*Introduction to Blockchain Technology and Applications*" by Prof. Sandeep Shukla, IIT Kanpur.
  - Introduction to Machine Learning by Dr. Balaraman Ravindran, IIT Madras.
  - Introduction To Internet Of Things By Prof. Sudip Misra IIT Kharagpur.
  - Design for internet of things By Prof. Prabhakar T V IISc Bangalore.

- Coursera
  - "*Blockchain Specialization by University*" at Buffalo and The state university of, New York
  - "*An introduction to programming the internet of things(IoT)*" by University of California, Irvine
  - Deep Learning Specialization by Andrew Ng , Kian Katanforoosh and Younes Bensouda Mourri at Stanford University, DeepLearning.AI
  - Machine Learning Crash Course with TensorFlow APIs https://developers.google.com/machine-learning/crash-course
  - "*Introduction to the Internet of Things and Embedded Systems*" by University of California, Irvine