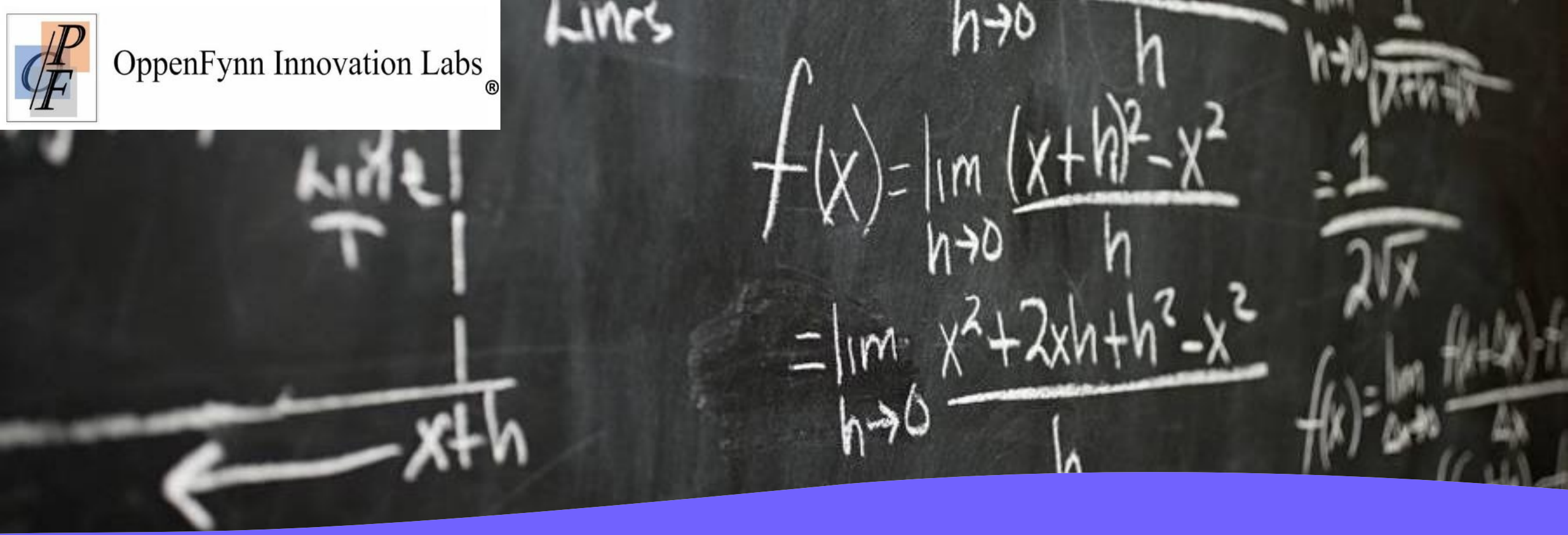
OppenFynn Innovation Labs®



Courses and Services Offered by OppenFynn Innovation Labs

We are committed to empower younger generation with state of the art technologies towards sustainable career growth as future technocrats and entrepreneurs

Certification Course on Machine Learning – Available in offline/ self paced modes.

Duration : 4 months

Topics Covered in brief

1. Introduction to Machine Learning, Types of Machine Learning Systems,
2. Exploratory Data Analysis on Numeric Data
3. Classification and Training Models
4. Support Vector Machines and Decision Trees
5. Ensemble Learning and Random Forests
6. Dimensionality Reduction and Unsupervised Learning Techniques
7. Reinforcement Learning

The course includes hands on assignments and guided projects. Course completion certificate will be issued at the end of completion of the course

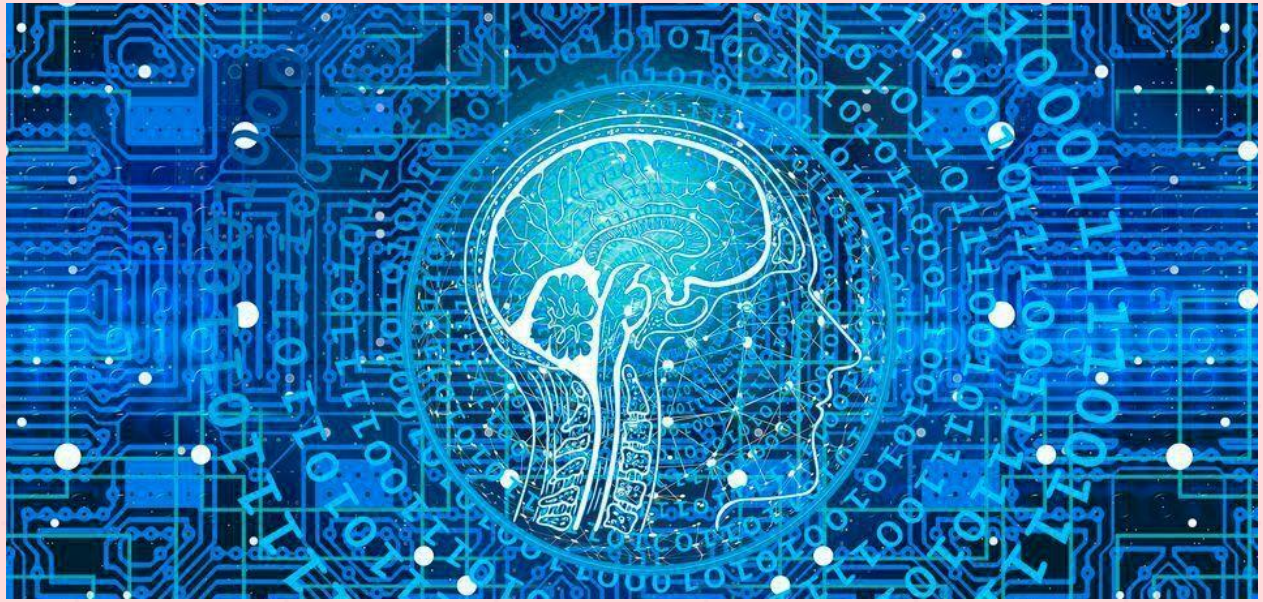
In case of project submission a separate project certificate will be issued.

Syllabus in Detail for Certification Course on Machine Learning

1. **Introduction**: Machine learning Landscape: what is ML?, Why, Types of ML, main challenges of MLintroduction to Python & Pytorch programming, , Python libraries: Numpy, Pandas, Keras, TensorFlow, Scikit Learn, MatplotLib and other libraries will be covered in detail
2. **End to end Machine learning Project** : Working with real data, Look at the big picture, Get the data, Discover and visualize the data, Prepare the data, select and train the model, Fine tune your model Classification : MNIST, training a Binary classifier, performance measure, multiclass classification,error analysis, multi label classification, multi output classification.
3. **Exploratory Data Analysis** on Numeric Data, Image Data, Unstructured Data, Time Series Data: Statistical Inference, Data Preparation, Exploratory Data Analysis on Text Data, Medical Image Data, Numerical Data, Time Series Data will be covered in detail along with end to end execution of machine learning project
3. **Training Models**: Linear regression, gradient descent, polynomial regression, learning curves, regularized linear models, logistic regression Support Vector Machine: linear, Nonlinear , SVM regression.
4. **Decision Trees :** Training and Visualizing DT, making prediction, estimating class, the CART training, computational complexity, GINI impurity, Entropy, regularization Hyper parameters, Regression, instability Ensemble learning and Random Forest: Voting classifiers, Bagging and pasting, Random patches, Random forests, Boosting, stacking.
5. **Hands on training on Python packages**

Course Outcomes

1. Learners will get good understanding of Machine Learning Concepts along with associated mathematical frame work.
2. Will be able to code standard machine learning algorithms using Python.
3. Will get good exposure in using various python libraries.
4. Will be able to execute End to End Machine learning project.
5. Will have an added edge in carrier and facing interviews.



Certification Course on Introduction to Quantum Computing – Available in online Instructor Led/ self paced modes.

Duration : 4 months

Topics Covered in detail

1. Introduction and Overview to Linear Algebra, Quantum Mechanics, Quantum Computing Fundamentals
2. Quantum Bits, Quantum Computation, Implementation and Computation of Qubits
3. Quantum Circuits – Qubit Logic Gates
4. Quantum Information – Quantum Noise, Quantum Operations
5. Quantum Error Correction
6. Quantum Algorithms

Hands on sessions in Qiskit Programming Language.

The course is open to all and no prior coding experience is required

Fee Details

OppenFynn Innovation Labs®

Payment must be made preferably via online transfer to

OPPENFYNN INNOVATION LABS (GSTIN: 29AAHFO2616F1ZB)

Bank : IDBI Bank , Yelahanka Branch, Bangalore

Current Account No: 0694102000014076

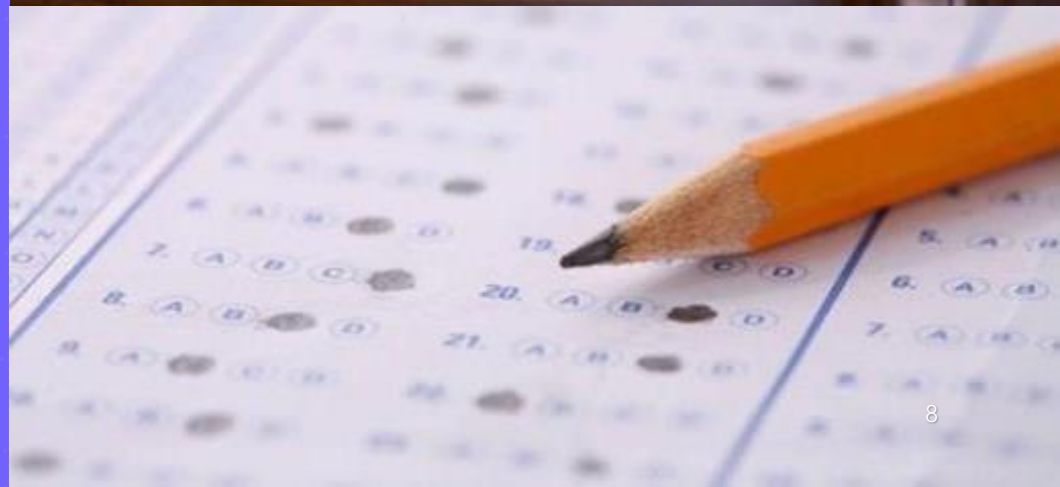
IFSC Code: IBKL0000694 or
Gpay to +918971876135

Please mention the course you want to enroll for

Certification Program Name	Offline	Online Instructor Led	Self Paced
Machine Learning	11800 (GST included)	11800 (GST Included)	2360 (GST included)
Introduction to Quantum Computing	Not Applicable	17700 (GST included)	5310 (GST included)

Other Specialized Services

- Project guidance and assistance, internships for UG and PG students
- PhD technical assistance is provided in the field of Machine Learning, Deep Learning, Photonics, MEMS
- We conduct tailor made Faculty Development Programs (in the areas of Machine Learning, Deep Learning, Quantum Computing, MEMS (micro electro mechanical system), Photonics




THE TEAM
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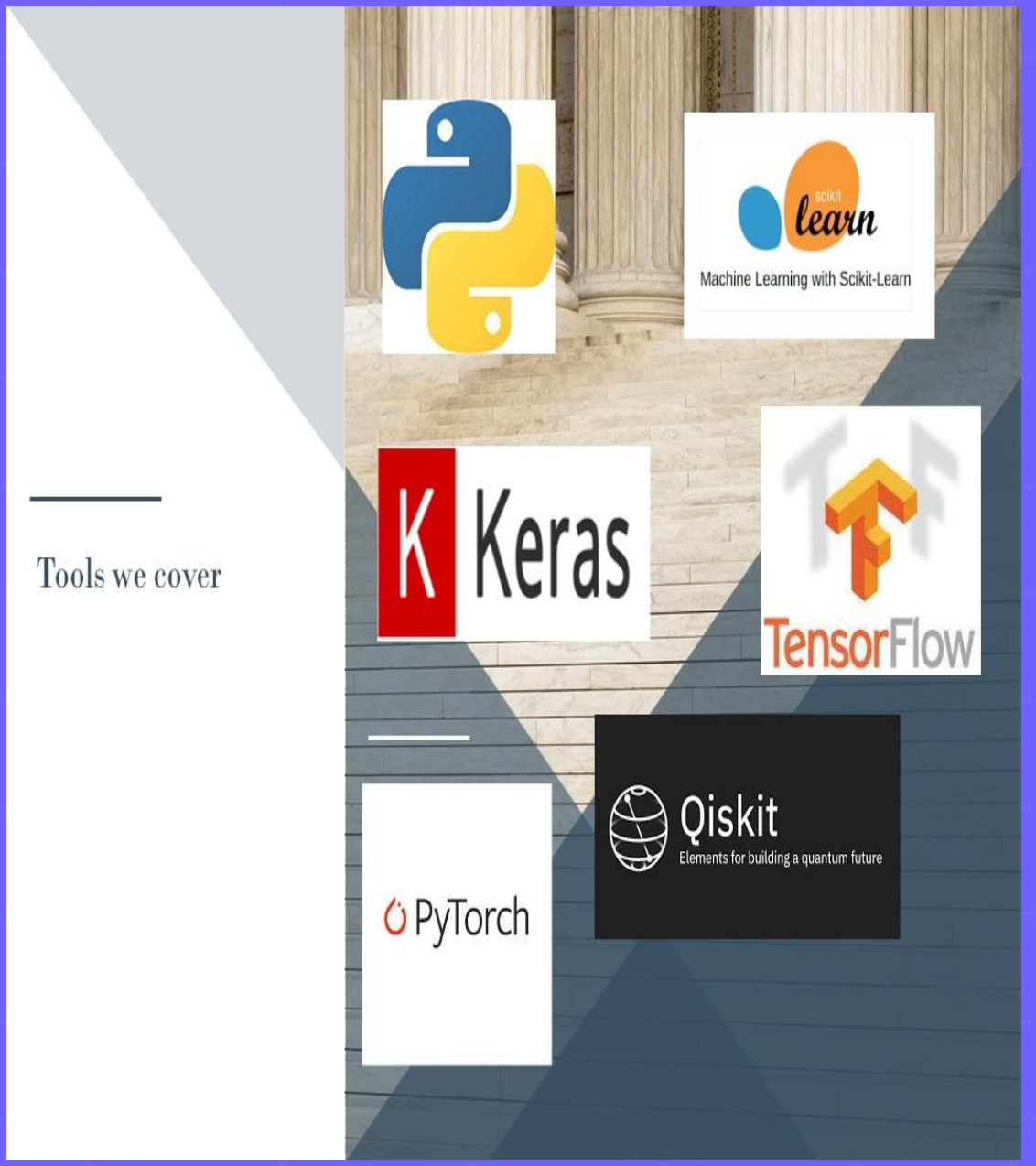
Tools we cover
scikit learn
Machine Learning with Scikit-Learn
Keras
TensorFlow
PyTorch
Qiskit
Elements for building a quantum future

THANK YOU!

OppenFynn Innovation Labs

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