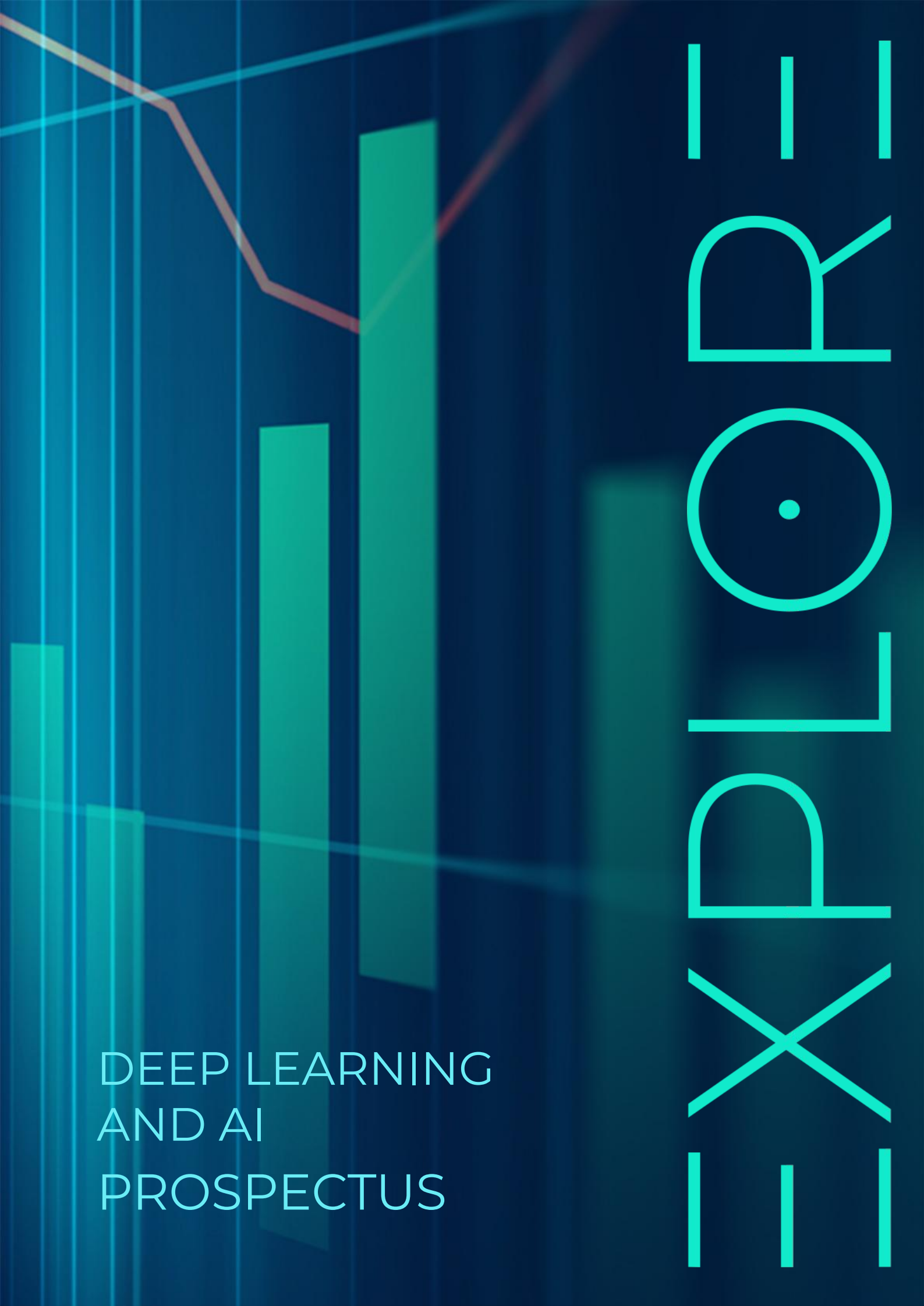

DEEP LEARNING AND AI PROSPECTUS

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EXPLORE

EXPLORE Overview

EXPLORE is a next generation Learning Institution that teaches students the skills of the future. From Data Science to Data Engineering to Machine Learning to Deep Learning we deliver cutting edge courses to satisfy your hunger to learn. Our Programmes are built by an amazing Faculty - we employ some of the world's most talented Scientists who have experience solving difficult problems on a global stage.

Our philosophy is to teach our students how to solve problems in the real world. We emphasise team-work, collaboration and working within constraints, under pressure, with deadlines while understanding context, audience and implementation challenges. We are not a theoretical institution (although we cover the theory) - we are a 'practical, hands-on, roll-up-your-sleeves and get stuff done' kind of institution. As real-world Scientists who have delivered impact in the world of work we're well positioned to deliver these skills.

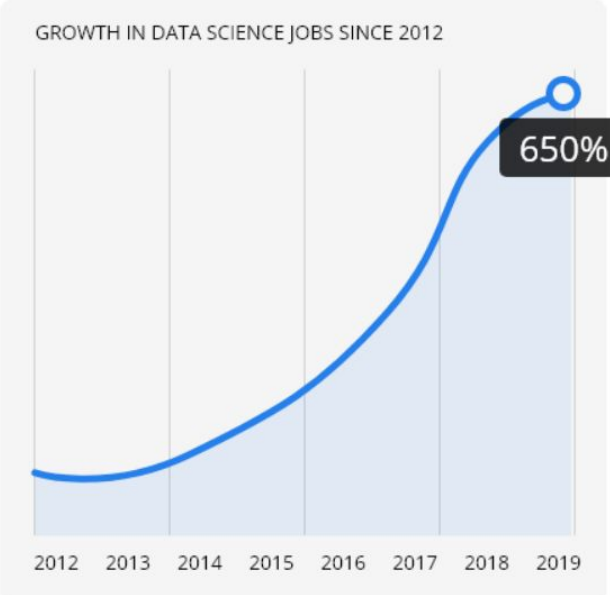
EXPLORE launched during 2013 and since then has taught 1,000's of students and solved many problems for businesses across multiple Industries across the world. We're reinventing education and invite you to join us to change things for the better.

Why Deep Learning?

Four megatrends are fundamentally changing the shape of our world:

1. Vast amounts of data are being generated every minute.
2. The processing speed of our machines is increasing exponentially.
3. We now have cloud providers who can store insane amounts of data for a few dollars.
4. Powerful open source algorithms that can read, write, translate and see are now available to everyone.

All of these things above mean that it's becoming easier and quicker to produce models that can analyze bigger/more complex data and deliver more accurate results – even on a very large scale. By building prediction models a business has a better chance of identifying profitable opportunities – or avoiding unknown risks.



Curriculum

Deep Learning and AI

Duration: 3 months ***Recommended Time:*** 80 hours

Tools Learnt: python

What is covered in the course:

Natural Language Processing

NLP techniques

- ➔ Basics of AI, and it's branches
- ➔ Overview of NLP and encoding text
- ➔ Tokenization, stemming and lemmatization
- ➔ Feature extraction and embeddings using Bag of Words, Text to Sequence and Word2Vec

Sentiment classification

- ➔ Logistic regression model to predict sentiment
- ➔ Comparing feature extraction techniques
- ➔ Performance metrics for testing outputs

Deep Learning Algorithms

Artificial Neural Network

- ➔ Structure of a neural network
- ➔ Gradient descent and backpropagation
- ➔ Hyperparameters - learning rate, batch size
- ➔ Activation functions and when to use which
- ➔ Building an ANN on keras

CNN's and RNN's

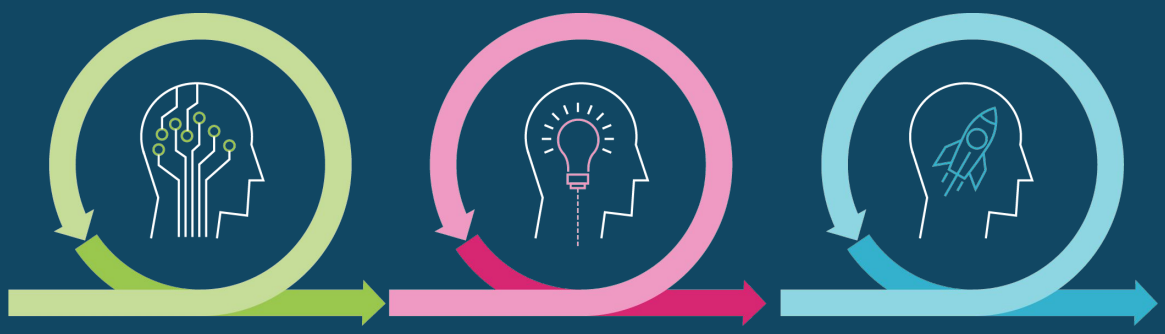
- ➔ Intro to CNN's and practical use cases
- ➔ Pooling and padding
- ➔ Building a CNN to classify images on keras
- ➔ Long Short-Term Memory Networks (LSTM) architecture
- ➔ Building a RNN for time series prediction

EXPLORE Philosophy:
Solving problems in the real world

At EXPLORE we focus on building our student's ability to solve problems in the real world. Building things that work and make a difference is hard - that's what we teach.

We're not a traditional learning institution that spends weeks teaching matrix multiplication on a whiteboard (although understanding that is useful) - we're a practical, solution-orientated institution that teaches our students to work in teams, under pressure, with deadlines while understanding context, constraints and the audience.

Our courses are typically broken into Sprints where we teach a core set of concepts within the framework of solving a problem in a team with a tight deadline.



Students cycle from Sprint to Sprint solving different problems in different teams as they build this core muscle over the course.

EXPLORE

Contact Information

For any **admissions related enquiries** mail us on:
admission@explore-ai.net

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