# ARTIFICIAL INTELLIGENCE

machine learning





**TechSim+** is an education platform to help individuals develop their professional potential in the most engaging learning environment. At TechSim+, we are working towards transforming this education wave into a tsunami! We are taking a full-stack approach of leveraging content, technology, marketing and services to offer quality education at scale in partnership with corporates & academics to offer a rigorous & industry relevant program.

The field of Data Science is maturing rapidly and demands professionals skilled not only in Statistics, but also in advanced concepts such as Natural Language Processing and Neural Networks. Our vision is to design and deliver a quality Training in Machine Learning/AI to produce top-notch Data Scientists and Machine Learning experts and help India capitalize the next wave of Artificial Intelligence. With TechSim+, we promise to equip you with the perfect mix of business acumen and technical capabilities to help you contribute to this technological revolution.

# **Prateek Mishra**

Co-Founder TechSim+



# WHY MACHINE LEARNING & AI WITH TechSim+?



# PROGRAM FROM TechSim+

Earn a reputed Industry Certificate.



# CUTTING EDGE CURRICULUM

Master advanced machine learning and artificial intelligence concepts



# SMART LEARNING

Lectures squeezed into 30-minute learning sessions, and 90 minute Practical sessions.



# FOR THE INDUSTRY, BY THE INDUSTRY

Learn application through Live projects.



# CAREER SUPPORT

Get 360 degree career support and get introduced to the right opportunities to upgrade yourself



# INDUSTRY PLACEMENTS

Receive 3 Placement opportunities in Al & ML industries to create your milestones



# PROGRAM CURRICULUM

## PRE-PROGRAM PREPARATION

#### INTRODUCTION TO PYTHON

Get acquainted with Data Structures and Object Oriented Programming

#### INTRODUCTION TO SQL & NoSQL

Learn SQL & Mongo DB for querying information from databases

#### **MATH FOR DATA ANALYSIS**

Brush up your knowledge of Linear Algebra, Matrices, Eigen Vectors and their application for Data Analysis

# **MACHINE LEARNING**

#### **LINEAR REGRESSION**

Learn to implement linear regression and predict continuous data values

#### **NAIVE BAYES AND LOGISTIC REGRESSION**

Understand how supervised learning is used for classification

#### **CLUSTERING**

Learn how to create segments based on similarities using K-Means and Hierarchical clustering

#### **SUPPORT VECTOR MACHINES**

Learn to classify data points using support vectors

#### **DECISION TREES**

Tree- based model that is simple and easy to use. Learn the fundamentals on how to implement them.



#### NATURAL LANGUAGE PROCESSING

#### **BASICS OF TEXT PROCESSING**

Get started with the Natural language toolkit, learn the basics of text processing in python

#### **LEXICAL PROCESSING**

Learn to extract features from unstructured text and build machine learning models on text data

#### SYNTAX AND SEMANTICS

Conduct sentiment analysis, learn to parse English sentences and extract meaning from them

#### OTHER PROBLEMS IN TEXT ANALYTICS

Explore the applications of text analytics in new areas and various business domains

### **DEEP LEARNING & NEURAL NETWORKS**

#### INFORMATION FLOW IN A NEURAL NETWORK

Understand the components and structure of artificial neural networks

#### TRAINING A NEURAL NETWORK

Learn the cutting-edge techniques used to train highly complex neural networks

#### **CONVOLUTIONAL NEURAL NETWORKS**

Use CNN's to solve complex image classification problems

#### RECURRENT NEURAL NETWORKS

Study LSTMs and RNN's applications in text analytics

#### CREATING AND DEPLOYING NETWORKS USING TENSORFLOW AND KERAS

Build and deploy your own deep neural networks on a website, learn to use tensorflow API and keras

### REINFORCEMENT LEARNING

#### INTRODUCTION TO RL

Understand how machines can be programmed to learn by themselves

#### **EXACT METHODS**

Learn the math behind Exact Statistics - Dynamic Programming, Monte Carlo methods,

#### APPROXIMATE METHODS

Learn policy gradient methods and their applications in learning



# **PROGRAM DETAILS**

#### **PROGRAM STARTS**

21<sup>st</sup> Jan 2019

### **WEEKLY COMMITMENT**

12 hours per week

4-5 hours of asynchronous learning time5-7 hours of assignments & projects1 live Project Discussion Every Week

### **DURATION**

3 Months

### **PROGRAM FEE**

INR 15,500 (Incl. of all taxes)

Flexible Payment Options Available

#### **ELIGIBILITY**

Bachelor's/Master's degrees in Computer Science/Engineering/Math/Statistics/ Economics/Science with a minimum of 50% marks in graduation

# **SELECTION PROCESS**

Candidates are expected to fill out an application form and then undergo a selection test to assess college-level mathematics and basic programming skill

### **EXAM DATE:**

Date: 19-Jan-2019

Get Register for Attend This Exam.

For Registration & further details, call us at +91-9893762256:

Address: 3<sup>rd</sup> Floor Kalpataru Tower Z-II MP Nagar Bhopal - 462011