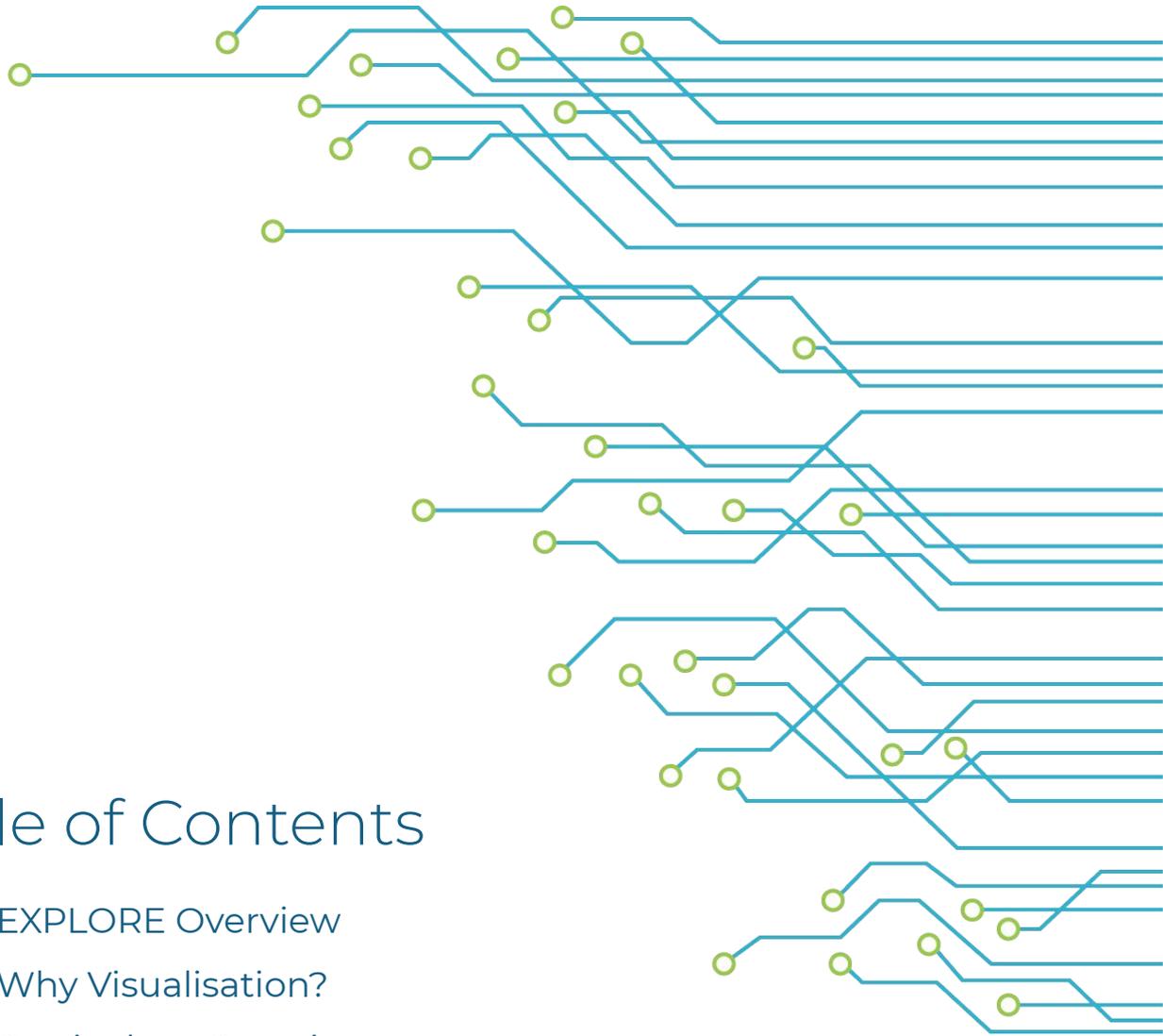


# III R O L P X III

MACHINE LEARNING  
FOR ANALYSTS  
PROSPECTUS



# Table of Contents

- 1. EXPLORE Overview
- 2. Why Visualisation?
- 3. Curriculum Overview
- 4. EXPLORE Philosophy: Solving problems in the real world
- 5. Contact Information

# 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.

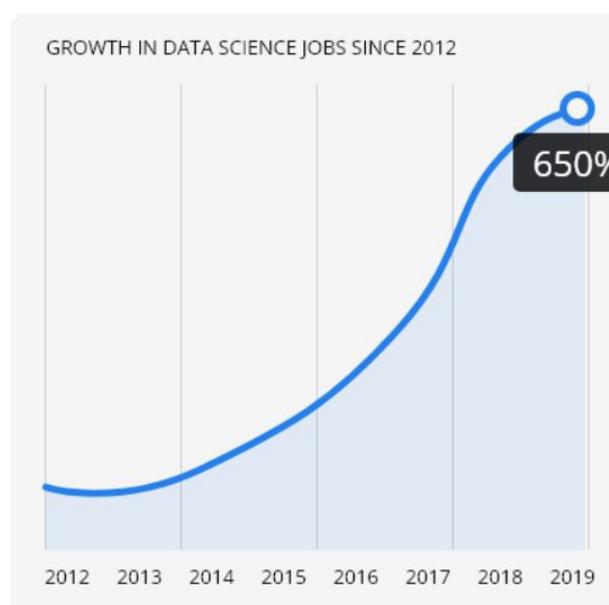
EXPLORE

# Why Machine 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

# Machine Learning for Analysts

**Duration:** 3 months

**Recommended Time:** 80 hours

**Tools Learnt:**  python™

### What is covered in the course:

## Python Programming

- Python Fundamentals**
  - Interactive vs scripting mode
  - Basic data types
  - Conditional statements - IF and ELSE IF
  - Creating and working with functions
- Python Data Structures**
  - Working with Strings, Numbers, Booleans
  - Lists and Tuples Semantics
  - Sets and Dictionaries Semantics
  - Importing Data - using Numpy and Pandas libraries
  - Working with Data Frames

## Machine Learning Algorithms

- Supervised learning**
  - Pre-processing data (encoding, train/test split)
  - Linear and Logistic Regression
  - Decision Trees and Random Forests
  - Support Vector Machines
  - K Nearest Neighbors
- Unsupervised learning**
  - Dimensionality reduction techniques - Variance Thresholds, Principal Component Analysis
  - Clustering algorithms - KMeans, Hierarchical, Gaussian Mixture Models

# EXPLORE Philosophy: Solving problems in the real world

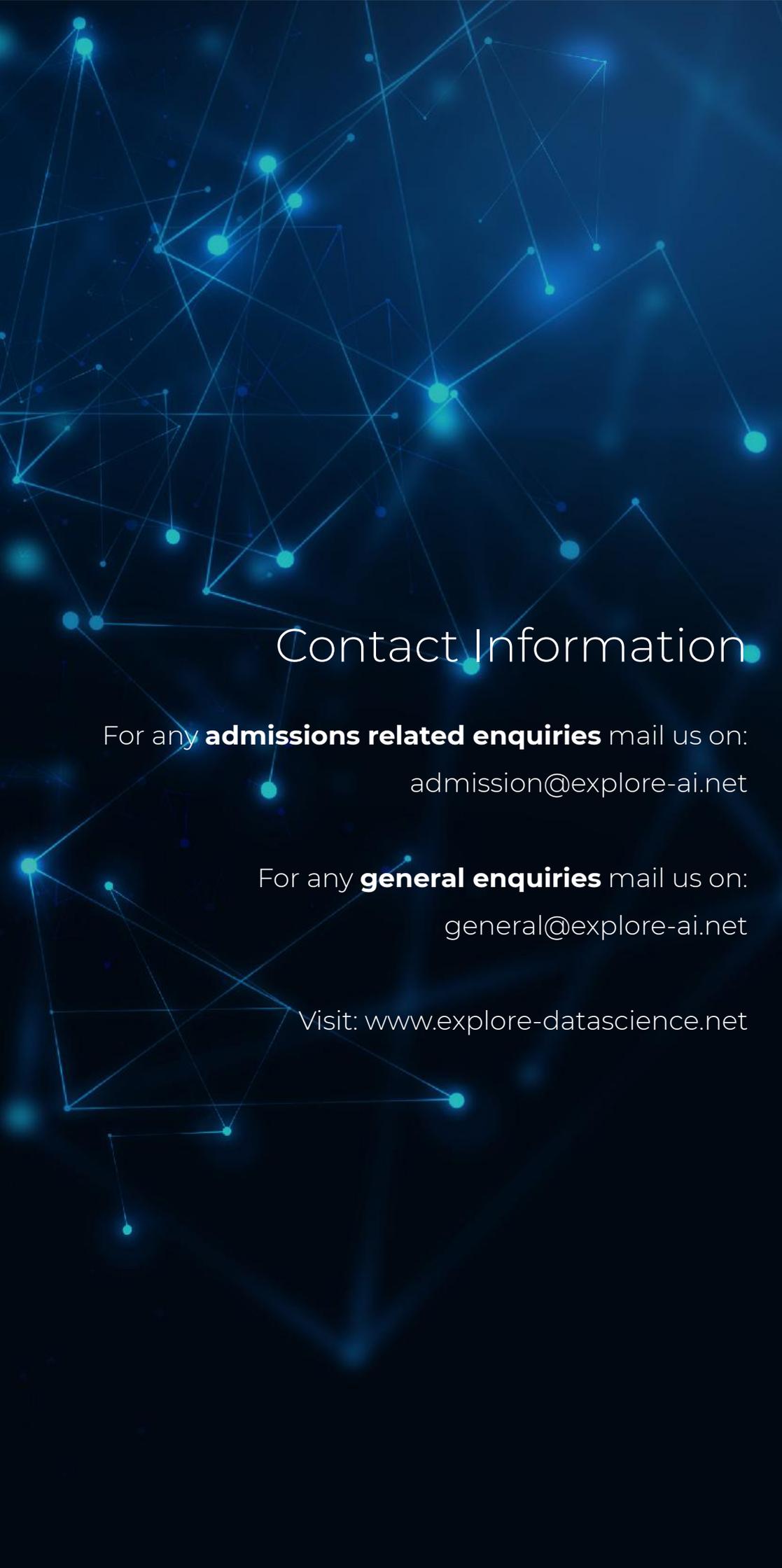
At EXPLORE we focus on building our student's ability to solve problems in the real world. Building things that work and make a difference is hard - that's what we teach.

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.



## Contact Information

For any **admissions related enquiries** mail us on:  
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For any **general enquiries** mail us on:  
[general@explore-ai.net](mailto:general@explore-ai.net)

Visit: [www.explore-datascience.net](http://www.explore-datascience.net)

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