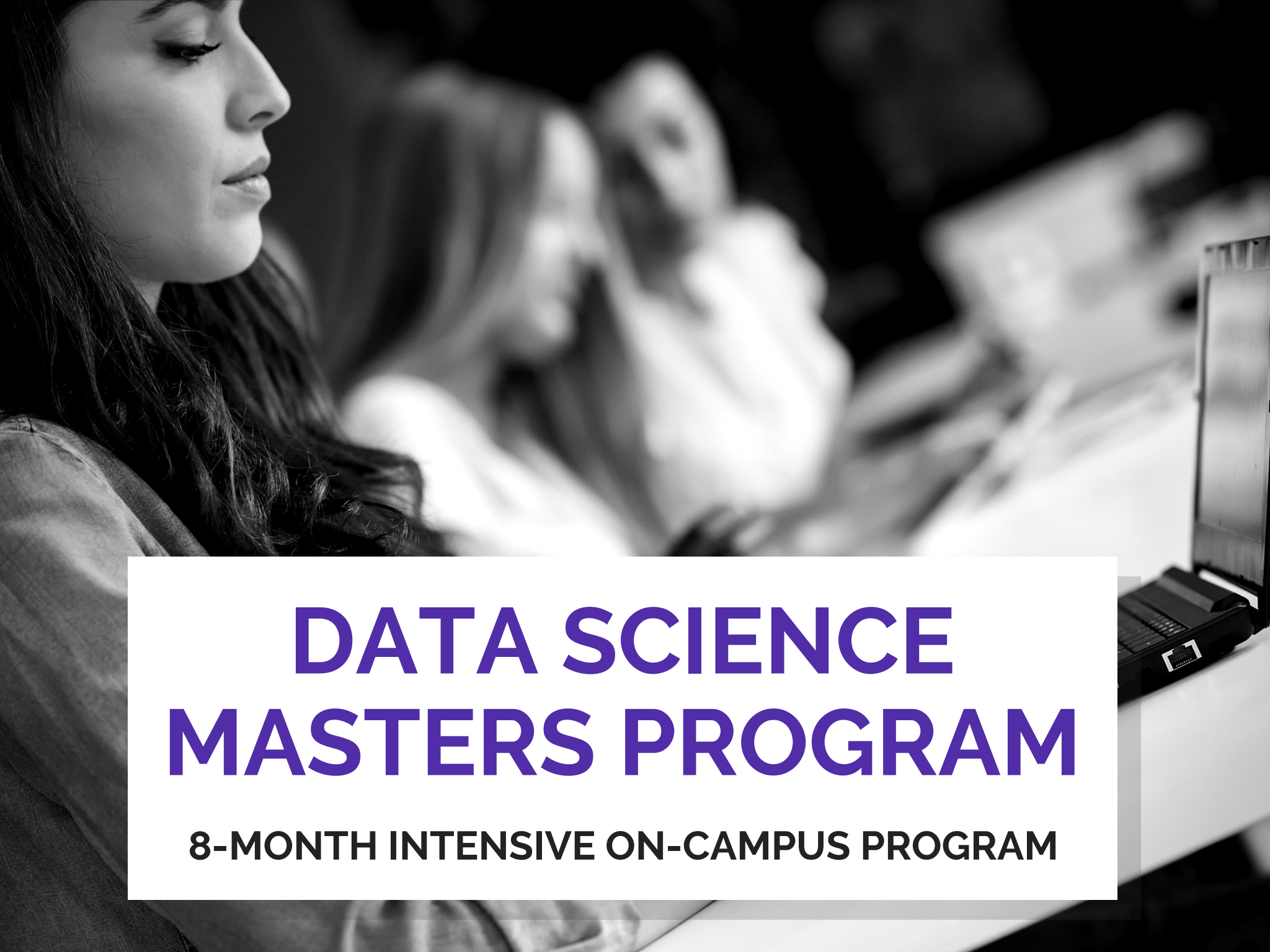


DATA SCIENCE MASTERS PROGRAM

8-MONTH INTENSIVE ON-CAMPUS PROGRAM

Welcome
to the world of GreyAtom

GreyAtom's Data Science Masters On-campus Program is an intensive programs with a 300+ hours curriculum designed around 6 data projects on real datasets.

This program will help you **learn advanced data science** where you'll be interacting with mentors, doing projects with your peers, and rubbing shoulders with the gurus of this domain.

At GreyAtom we are building a true blended learning experience where core learning happens on our **AI-based learning platform- Glabs** & assisted by "Mentors", "Peers" & "Subject Matter Experts".

"We are here to ensure that your learning experience at GreyAtom is exceptional."

Shweta Doshi

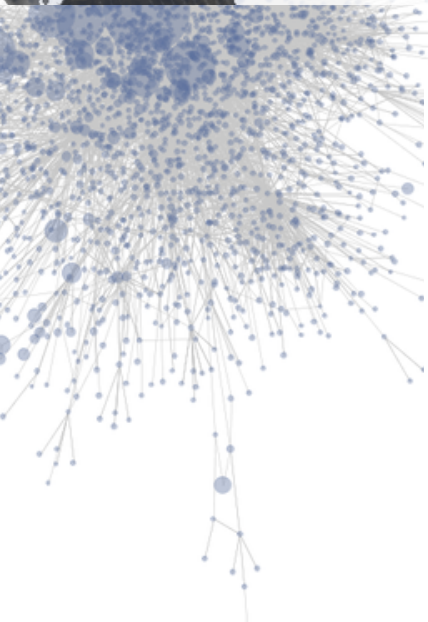
Co-founder & Head of Academics at GreyAtom

TABLE OF CONTENTS

WHY DATA SCIENCE?

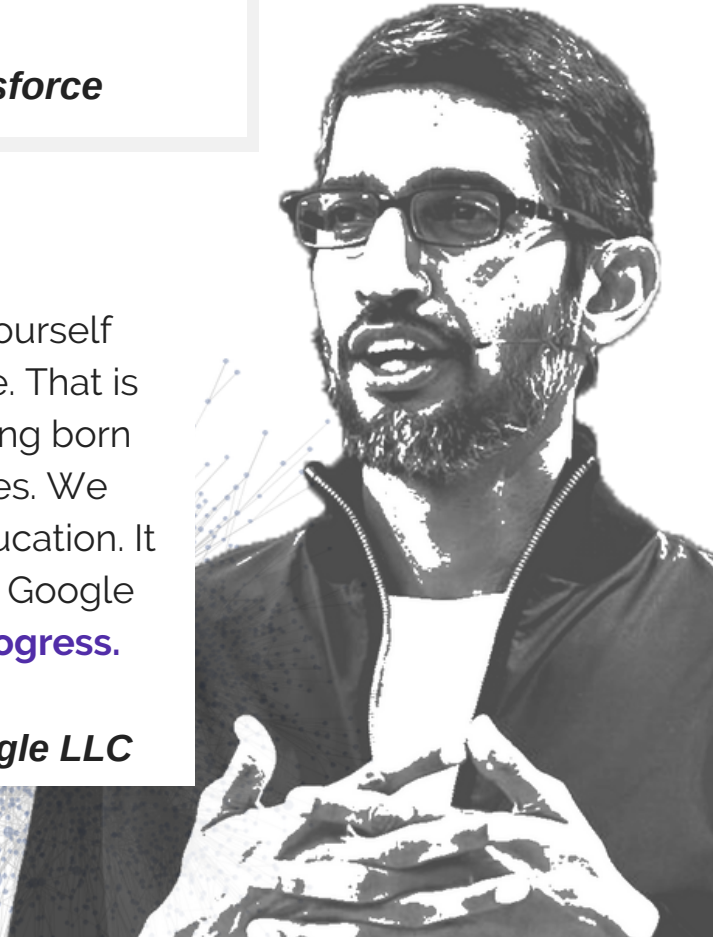
"'When I look at the next set of technologies that we have to build in Salesforce, **it's all data-science-based technology.** We don't need more cloud. We don't need more mobile. We don't need more social. **We need more data science."**

- Marc Benioff , CEO of Salesforce



"We know that 20 to 30 years ago, you educated yourself and that carried you through for the rest of your life. That is not going to be true for the generation which is being born now. They have to learn continuously over their lives. We know that. So we have to transform how we do education. It is important to understand that tomorrow, whether Google is there or not, **artificial intelligence is going to progress. Technology has this nature. It is going to evolve,**"

- Sundar Pichai, CEO of Google LLC



About us.

GreyAtom is an education technology company that conducts Bootcamp style immersive learning program for Applied Sciences - currently, focusing on Data Sciences. At the heart of student learning is GreyAtom's online learning platform that ensures gaining practical knowledge while learning .
The programs will enable a learner to apply problem-solving and creative thinking to real-world data sets, gaining experience across the entire data science stack. You will use your new skills to build projects while learning new technologies on the fly.

Data Science Masters Program will help you get hands-on with Python for Data Science, summarize data for analysis, solve problems, implement, evaluate and productionize solutions to data science problems by building appropriate machine learning models and algorithms.

Why GreyAtom?

In-house Adaptive Learning Platform

Our Platform delivers an unparalleled 360-degree view of the curriculum, including Integrations with GitHub, Jupyter, AWS, Medium blogs. Complete content curriculum, and projects and building an online profile with every problem statement and challenges you solve. Leader-boards to test your overall competitiveness and readiness, based on all activities, interactions, challenges, quizzes, and projects, etc. in one repository, accessible from anywhere to make learning a seamless and effective.

Globally developed and optimized ecosystem

A co-learning ecosystem of Aspirants, Academia and Industry. Access to learning material by experts, videos of industrial panel discussions, and much more under one roof on the go. Learning outcomes optimized to not only meet industry standards but to also give you hands-on learning to showcase demonstrated skills with Peer-to-peer collaboration. Real-time customized feedback on overall competency development.

Self-sourced academic content

Get the most out of the up-to-date curriculum designed by leading in-house academics team and industry professionals having expertise in practicing Data Science using real tools and workflows used by experts. Work on real industry data-sets, problems and live data sets to build and release real products.

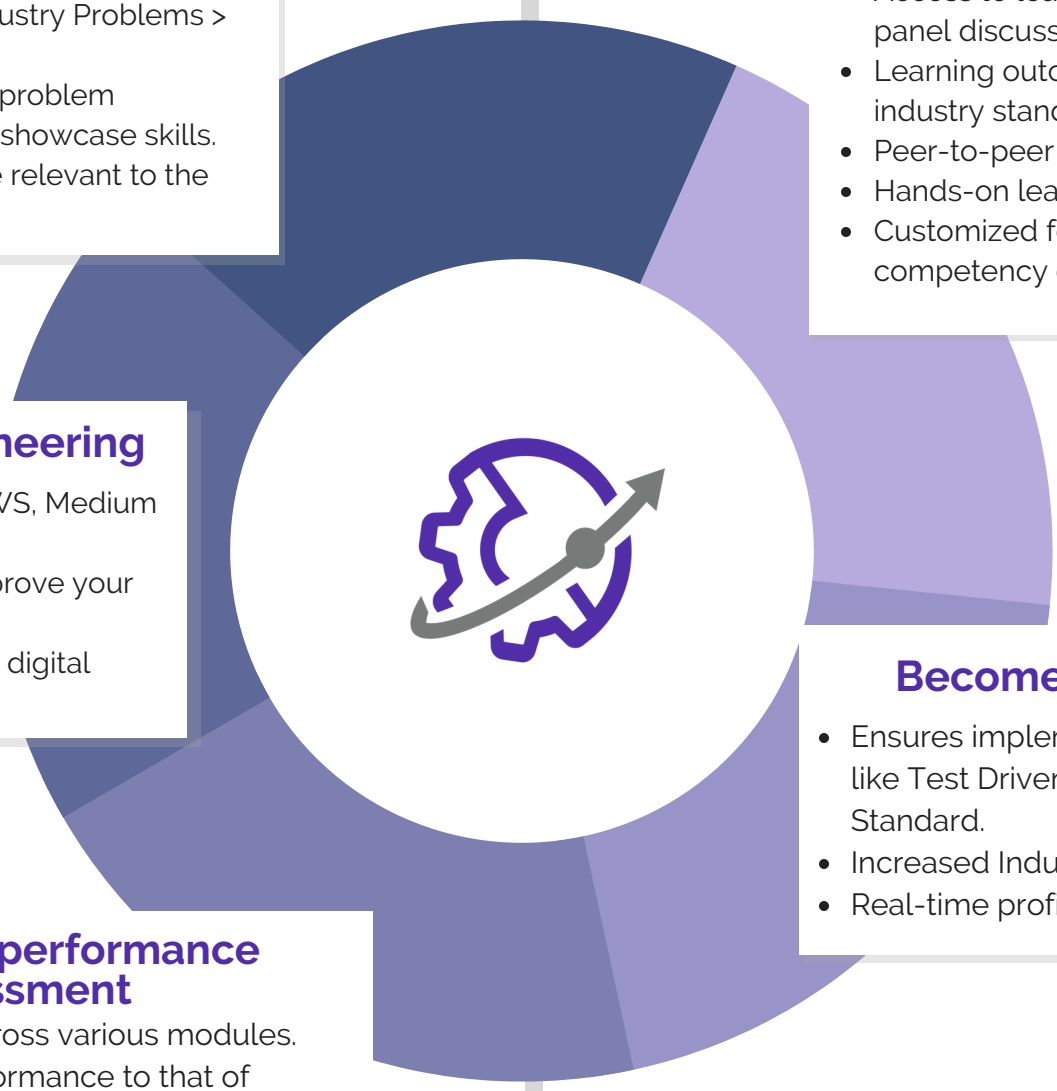
Our Ecosystem

Industry Based Curriculum

- Real Datasets > Real Industry Problems > Expedited Learning.
- Hackathons on industry problem statements to build and showcase skills.
- Building models that are relevant to the industry.

Immersive learning

- Access to learning material, videos of panel discussions, and much more.
- Learning outcomes optimized to meet industry standards.
- Peer-to-peer collaboration.
- Hands-on learning.
- Customized feedback and real-time competency development.



Social Profile Engineering

- Integration with GitHub, AWS, Medium Blogs, and more.
- Demonstrate skills and improve your chances of getting hired.
- Improve and optimize your digital footprint.

Become Industry Ready

- Ensures implementation of best practices like Test Driven Development and Coding Standard.
- Increased Industry Readiness.
- Real-time profile building.

Qualitative performance assessment

- Competency across various modules.
- Comparing performance to that of industry benchmarks.
- Personalized learning.

DATA SCIENCE MASTERS PROGRAM

Our Flagship classroom program leverages the power of immersive learning to give you an in-depth understanding of ML

8	40	204	11	300+
MONTHS	LEARNERS PER BATCH	CLASSROOM HOURS	PROJECTS & HACKATHONS	DIY ASSIGNMENTS

Mentors
From the industry

Puneet Jain
Data Scientist
at Collinson Group

Arunabh Majumdar
Lead Data Scientist
at Scalpel Ltd.

Manas Ranjan Kar
Associate Vice President
- Data Science & NLP at
Episource LLC

Parag Pansare
AWS Cloud Architect at
Accenture

Hardik Udeshi
Senior Data Scientist at
Vistaar Technologies

** Mentors will be assigned based on their availability

1. PYTHON DATA SCIENCE TOOLKIT
2. FOUNDATIONAL ML
3. SUPERVISED TECHNIQUES
4. MORE SUPERVISED & UNSUPERVISED ML TECHNIQUES
5. WORKING WITH TEXT DATA
6. CAREER SERVICES
7. DEPLOYMENT OF ML MODEL
8. CAPSTONE PROJECT

DSMP

At a glance

01 PYTHON DATA SCIENCE TOOLKIT

1. Getting Started with Python
2.Handling Program Flow in Python
3. Manipulating Data using NumPy
4. Data Wrangling with Pandas
5. Data Visualization with Matplotlib
6. Python Hackathon 1

02 FOUNDATIONS OF MACHINE LEARNING

1. Summarizing Data with Statistics
2. Introduction to Probability
3. Making inference from Data
4. Make your first prediction with Linear Regression
5. Regularization

03 SUPERVISED MACHINE LEARNING

1. EDA and Data Pre-processing
2. Logistic Regression
3. Improving your model with Feature Selection
4. Decision Tree

04 SUPERVISED & UNSUPERVISED ML

1. Ensembling & Random Forest,
2. Gradient Boosting Machines
3. ML: Clustering/ k-means
4. Challenges in ML
5. Support Vector Machines
6. Hackathon 2

05 TEXT ANALYTICS

1. Foundations of Text Analytics
2. Topic Modelling on Text
3. Clustering/ k-means
4. Sentiment Analysis using NLP
5. Hackathon 3

06 CAREER SERVICES

1. Mock Interviews
2. Post Program 100% Placement Assistance
3. Hiring Network Access + Hiring Challenges
4. Resume Preparation
5. LinkedIn Presence Building
6. Interview Questions Access
7. Videos on Career Building

07 DEPLOYMENT OF ML MODEL

1. Basics of ML deployments
2. Deployment in Cloud

08 CAPSTONE PROJECT

1. Capstone Project

01.

PYTHON DATA SCIENCE TOOLKIT

If **Data Science** is a skill, the language through which it is picked up is **Python**. Python is a very beginner-friendly and versatile language with great community support. Companies all over the world use python to develop data science solutions that make a business impact. And shortly, it will be your turn, once you become a data scientist! In this module, you'll learn python in an elaborate manner by performing tasks while learning the concept by solving real industry problems

1. Getting Started with Python
2.Handling Program Flow in Python
3. Manipulating Data using NumPy
4. Data Wrangling with Pandas
5. Data Visualization with Matplotlib
6. Python Hackathon 1

Learning Outcomes

Learn to manipulate large data sets. You will be analysing performance of different countries in Olympics from Wikipedia to get insightful information and present visualizations using Python.

** Topics of the projects are subject to change depending on the then available industry data sets

02.

FOUNDATIONAL MACHINE LEARNING

Every great building needs a solid foundation. While working towards a career in Data Science, it is a no-brainer that a strong foundation is needed. In this module, we will brush up the mathematical building blocks - probability, statistics, linear algebra as well as get introduced to the first ML algorithm - Linear Regression. The math is onboarded in a gentle manner with intuition taking the front seat over jargon.

1. Summarizing Data with Statistics
2. Introduction to Probability
3. Making inference from Data
4. Make your first prediction with Linear Regression
5. Regularization

Learning Outcomes

This will help you build a strong foundation on statistical concepts and perform analysis with real-world data sets using Python and its associated libraries.

You will be dealing with a retail bank dataset and predict the amount of deposit a customer will make in this year.

** Topics of the projects are subject to change depending on the then available industry data sets

03.

SUPERVISED TECHNIQUES

After the successful completion of this module, one is expected to be proficient in various predictive models and handling dirty data. With this module, you will become proficient in taking an unclean and real dataset and transform it into a clean dataset on which any predictive model could be applied to derive insights.

1. EDA and Data Pre-processing
2. Logistic Regression
3. Improving your model with Feature Selection
4. Decision Tree

Learning Outcomes

You are provided with a dataset of an online fashion retailer, use the data to predict the right fit of clothing for the customer.

** Topics of the projects are subject to change depending on the then available industry data sets

04.

MORE SUPERVISED, UNSUPERVISED ML TECHNIQUES

Boost your machine learning arsenal with more tools with advanced techniques like random forests and gradient boosting. Learn how to derive insights from even unlabelled data using unsupervised learning methods. These will take your machine learning mastery to the next level.

1. Ensembling & Random Forest,
2. Gradient Boosting Machines
3. Clustering/ k-means
4. Challenges in ML
5. Support Vector Machines
6. **Hackathon 2**

Learning Outcomes

We will learn about more advanced algorithms for Supervised Learning and also learn about unsupervised learning.

** **Topics of the projects are subject to change depending on the then available industry data sets**

05.

WORKING WITH TEXT DATA

Test the waters of Text analytics with a deep dive into advanced techniques like topic modelling and sentiment analysis. At the end of this module, you will be able to apply any machine learning model on text data.

1. Foundations of Text Analytics
2. Topic Modelling on Text
3. Clustering/ k-means
4. Sentiment Analysis using NLP
5. **Hackathon 3**

Learning Outcomes

In this module we will deviate from numerical data and learn how to deal with text data and apply traditional machine learning algorithms on the same

In this project, you would get access to Haptik's user chat conversations. You need to classify it into the right business vertical and assist the user with the requested services

** **Topics of the projects are subject to change depending on the then available industry data sets**

06.

CAREER SERVICES

Get started on your career development. Career development is a journey, and we offer one-on-one assistance to help you plan and achieve career success.
GreyAtom Career Services is not just a placement assistance service, we will help you throughout your GreyAtom journey to make your learning experience more enriching.
With GA Career Services, we want to enable you to build your personal brand with the aids and resources that we send.
You can reach out to us at - **careerservices@greyatom.com**

Learning Outcomes

1. Mock Interviews
2. Post Program 100% Placement Assistance
3. Hiring Network Access + Hiring Challenges
4. Resume Preparation
5. LinkedIn Presence Building
6. Interview Questions Access
7. Videos on Career Building

** Topics of the projects are subject to change depending on the then available industry data sets

07.

DEPLOYMENT OF MACHINE LEARNING MODEL

Real world machine learning applications typically consist of many components in a data processing pipeline. We describe a framework for constructing these ML Pipelines. This framework can help us construct end-to-end workflows with a toolbox of off-the-shelf components which we have developed for text, image classification and a high-performance linear algebra library that we use for training models. This framework thus, helps us obtain state-of-the-art results in many machine learning tasks

1. Basics of ML deployments
2. Deployment in Cloud

Learning Outcomes

Deploy the data science models built in real time. Create your own data science products.

** Topics of the projects are subject to change depending on the then available industry data sets

08.

CAPSTONE PROJECT

A capstone project will allow the learners to create a usable/public data product and be used to test your data science learnt so far and showcase the same to potential employers. Projects are drawn from actual business use cases faced by companies.

Choose your Capstone from multiple business problems with real impact projects

Learning Outcomes

Our industry partner provides access to real data for you, which can then be mined for actionable insights in a time-bound industrial setting.

** Topics of the projects are subject to change depending on the then available industry data sets

Testimonials

Don't just take our word for it.

Manish Nemanna Kembral
Vice-President at HDFC

The instructors were amazing and the active involvement of founders was helpful. What I loved the most were guest speaker sessions. We got a great insight to what the industry needs which helped us learn the correct skills.

★★★★★

Nitika Goel
Data Scientist at Flexiloans

★★★★★

Love their program. Awesome learning platform and very helpful interview prep.

Darshin Doshi
Programmer at Cognizant

★★★★

GreyAtom has a unique and effective approach where the faculty breakdowns complicated concepts to easier milestones with practical executions that leave no room for not understanding concepts theoretically and practically.The curriculum is so comprehensive and industry-focused with real workflows and tools that will make you fall in love with learning and Data Science. I would recommend it to everyone who wants to learn Data Science.

Vishnu Kamath
System Engineer at Infosys

★★★★★

Wonderful Experience!!! Data Science can be mastered only by working on real-life data sets which Greyatom provides in its curriculum.Highly recommend to all the data science enthusiasts out there.

Bhavesh Bhatt
Data Scientist at Flexiloans

★★★★★

Multiple capstone projects at GreyAtom have helped me develop my skills on Big Data and all other elements of Data Science.

Students
Placement Stories

Nikhil Akki

May, 2017 Batch

Data Science Masters Program

Pre Greyatom

Assistant Professor

Business Statistics

SVIMS

Post Greyatom

Data Scientist

Deloitte.

Sagar Dawda

November, 2017 Batch

Data Science Masters Program

Pre Greyatom

Pre-Sales Manager

Post Greyatom

Data Scientist

epi EPISOURCE

Nitika Goel

May, 2017 Batch

Data Science Masters Program

Pre Greyatom

IT Service Desk Engineer

Cognizant

Post Greyatom

Data Scientist

FLEXILOANS

Chirag Pujari

December, 2017 Batch

Data Science Masters Program

Pre Greyatom

Data Analyst

Course5

Post Greyatom

Data Scientist

nielsen

Darshin Doshi

July, 2017 Batch

Data Science Masters Program

Pre Greyatom

Programmer

Cognizant

Post Greyatom

Data Scientist

epi EPISOURCE

Industry partners

Community partner

Our community partner DataGiri is the largest data science community in Mumbai. It is widely spread across the globe covering chapters in India, London, US and Australia. DataGiri is 100,000+ members strong global community covering a broad range of enthusiastic aspirants to accomplished industry practitioners. This helps us to keep ourselves updated with the latest trends in Data Science. We educate by curating and sharing the collective wisdom of our community at our events and through multi-media projects. We collaborate with both the data science community and the broader community and provide expert advice to new companies, projects, and non-profit organizations.

400 CHAPTERS

120 EVENTS

100,000+ MEMBERS

Srikanth Velamakanni, Co-founder and CEO of Fractal Analytics @ DataGiri

Oct 28, 2017, 2.30 p.m.
ISME, Mumbai

542 Attendees

DataGiri with Morgan Stanley

Feb 24, 2018, 2:30 p.m.
Morgan Stanley, Mumbai

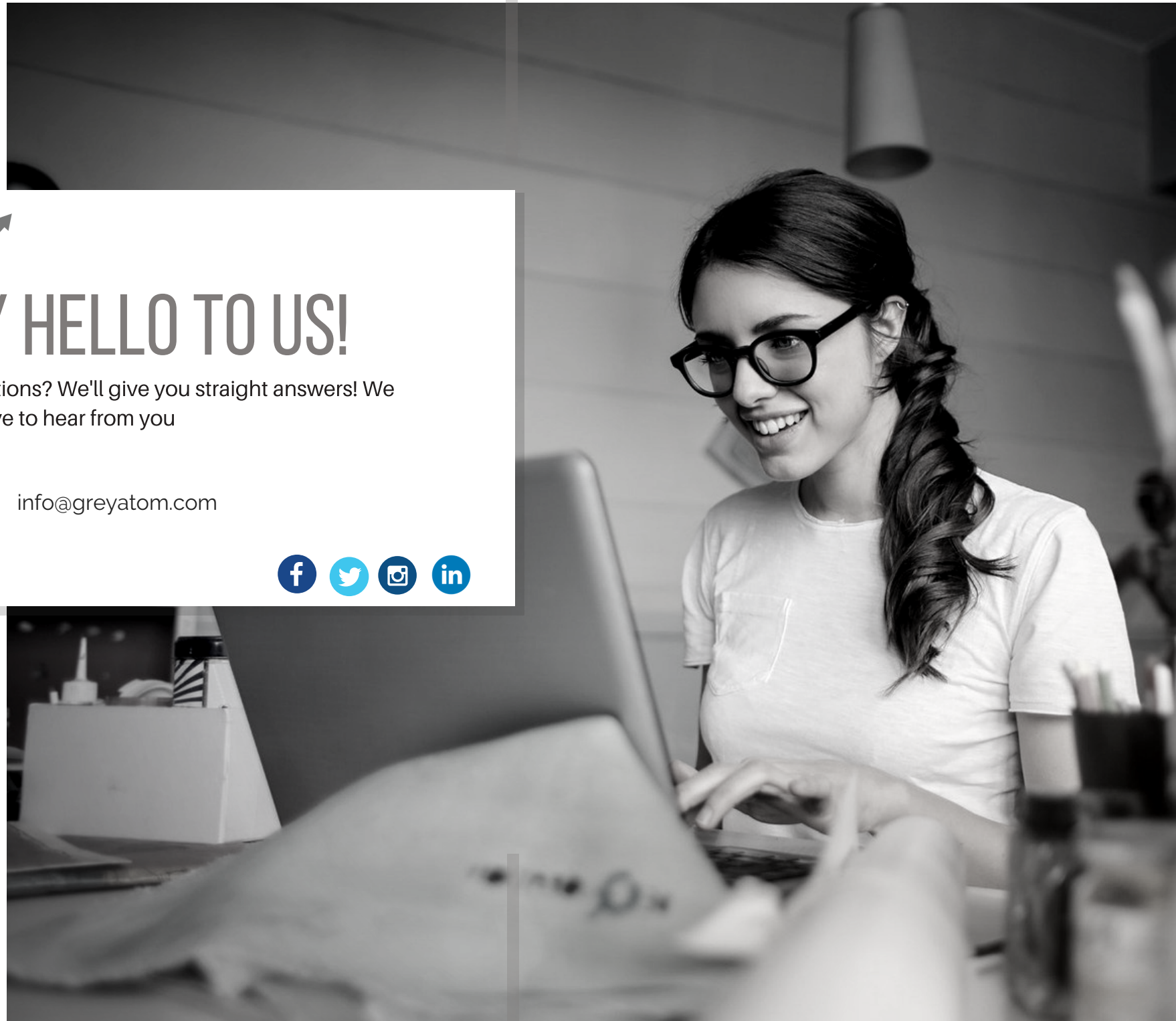
396 Attendees

Data @UBER Tech Talk In Association With DataGiri

Mar 8, 2018 2:30 p.m.
91Springboard, Bengaluru

652 Attendees

Join us!



SAY HELLO TO US!

Got questions? We'll give you straight answers! We would love to hear from you

info@greyatom.com