



**GREYATOM**

**YOUR LEARNING BEGINS HERE**



**GreyAtom's Data Science Masters Program with Computer Vision** is a hybrid program with 7 months in classroom and 3 months online with live mentor intervention.

The **DSMP with CV Specialization** will build upon your Data Science knowledge and turns you into a hands-on CV practitioner with deep learning skills.

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



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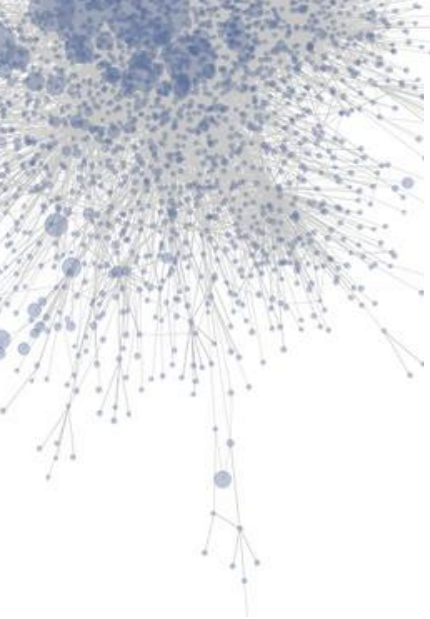
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"When I look at the next set of technologies that we have to build in Salesforce, **it's all data-science-based technology.** We don't need more cloud. We don't need more mobile. We don't need more social. **We need more data science.**"

*- 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.

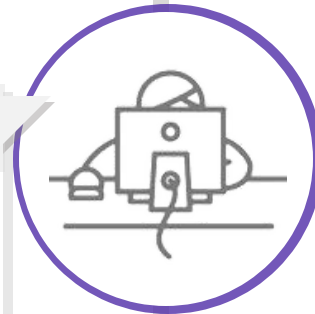


## Globally developed and optimized ecosystem

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

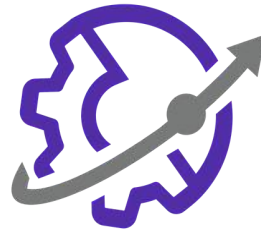
- Integration with GitHub, AWS, Medium Blogs, and more.
- Demonstrate skills and improve your chances of getting hired.
- Improve and optimize your digital footprint.

### 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**

**7-MONTH INTENSIVE ON-CAMPUS PROGRAM**



# DATA SCIENCE MASTERS PROGRAM

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

**7**

**MONTHS**

**40**

**LEARNERS  
PER BATCH**

**178**

**CLASSROOM  
HOURS**

**8**

**PROJECTS &  
HACKATHONS**

**300+**

**DIY  
ASSIGNMENTS**



**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** 9  
From the industry”

\*\* 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

11

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**

## 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](mailto: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**

A young man with dark, wavy hair and a light beard is smiling warmly at the camera. He is wearing a light-colored, vertically striped button-down shirt. The background is a bright, modern office with large windows. Three other people are visible in the background, slightly out of focus: a woman on the left, a man in the center, and a woman on the right who appears to be working on a laptop. The overall atmosphere is professional and collaborative.

# **DEEP LEARNING WITH COMPUTER VISION**

**3-MONTH ONLINE**



## DEEP LEARNING WITH CV

The Deep Learning with CV Specialization will build upon your Data Science knowledge and turns you into a hands-on Computer Vision practitioner with deep learning skills.

**3**

MONTHS

**15**

LEARNERS PER  
GROUP

**14**

MENTOR-LED  
SESSIONS

**3**

GUIDED  
PROJECTS

**66**

DIY  
ASSIGNMENTS



## **Avinash Ahuja**

Machine Learning  
Engineer at LinkedIn



## **Sidharth Ramachandran**

Head of Data  
Science at GfK



## **Manas Ranjan Kar**

Associate Vice President  
- Data Science & NLP at  
Episource LLC

# “Mentors 9 From the industry”



## **Parag Pansare**

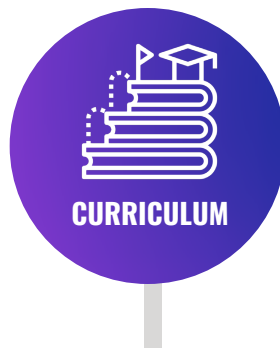
AWS Cloud Architect  
at Accenture



## **Manish Kukreja**

Data Scientist at Auckland  
DHB

\*\* Mentors will be assigned based on their availability



**1. CV BASICS**

**2. DEEP LEARNING BASICS**

**3. DEEP LEARNING FOR CV**



# CV

## At a glance

01

### CV BASICS

Week 1 - 2

1. Introduction to CV, Hands-on OpenCV
2. Image classification using supervised learning

02

### DEEP LEARNING BASICS

Week 3 - 6

1. Intro to Deep Learning, Multi-Layer Perceptron (MLP)
2. Deep Artificial Neural Network architecture
3. Optimizing Deep Neural Networks
4. **Industry Partner Project**

03

### DEEP LEARNING FOR CV

Week 7 - 14

1. Convolutional Neural Networks Foundations
2. Segmentation and Object Detection in CNN
3. Representation Learning
4. Recurrent Neural Networks
5. Style Transfer
6. Generative Models
7. **Capstone - Industry Partner Project**

## 01.

## COMPUTER VISION BASICS

In this module, you will be introduced to basic building blocks of Computer Vision. With this module, you will learn to solve use cases like image classification and face detection.

1. Introduction to CV, Hands-on OpenCV
2. Image classification using supervised learning



### Project & Learning Outcomes

- Learn to work with image data
- Apply machine learning to classify images

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

## 02.

## DEEP LEARNING BASICS

In this module, you will learn the nuts and bolts of deep learning. These are important skills that will be used later for solving various vision use cases.

1. Intro to Deep Learning, **Multi-Layer Perceptron (MLP)**
2. Deep Artificial Neural Network architecture
3. Optimizing Deep Neural Networks
4. **Industry Partner Project**

### Projects & Learning Outcomes

- Understand the basics of deep learning
- Implement deep learning models using Keras
- Learn how to optimize deep neural network

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

## DEEP LEARNING FOR CV

In this module, you will be introduced to different use cases of Computer Vision like object detection, style transfer, image generation and so on. You will solve the use cases using the state of the art deep learning methods

1. Convolutional Neural Networks Foundations
2. Segmentation and Object Detection in CNN
3. Representation Learning
4. Recurrent Neural Networks
5. Style Transfer
6. Generative Models
- 7. Capstone - Industry Partner Project**

### Projects & Learning Outcomes

- Introduction to various Computer Vision use cases
- Solve computer Vision use cases using Deep Learning
- Learn advanced Computer Vision models

**\*\* 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.



**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.



**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.



**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



[in](#) **Nikhil Akki**

May, 2017 Batch  
Data Science Masters Program

**Pre Greyatom**  
Assistant Professor  
Business Statistics



**Post Greyatom**  
Data Scientist  
**Deloitte.**



[in](#) **Nitika Goel**

May, 2017 Batch  
Data Science Masters Program

**Pre Greyatom**  
IT Service Desk Engineer  
 Cognizant

**Post Greyatom**  
Data Scientist  
 FLEXILOANS



[in](#) **Chirag Pujari**

December, 2017 Batch  
Data Science Masters Program

**Pre Greyatom**  
Data Analyst



**Post Greyatom**  
Data Scientist



[in](#) **Sagar Dawda**

November, 2017 Batch  
Data Science Masters Program

**Pre Greyatom**  
Pre-Sales Manager



**Post Greyatom**  
Data Scientist



[in](#) **Darshin Doshi**

July, 2017 Batch  
Data Science Masters Program

**Pre Greyatom**  
Programmer  
 Cognizant

**Post Greyatom**  
Data Scientist  
 EPI  
EPISOURCE

# “Industry partners



**Deloitte.**



**BARCLAYS**



**nielsen**  
.....



**BNP PARIBAS**



**YES BANK**



**Mahindra**



**bharti AXA**  
general insurance



**epi**  
EPISOURCE



**haptik**



**TATA**  
TATA TECHNOLOGIES



**fractalab**



**CleverTap**

# 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](mailto:info@greyatom.com)

