# DATA SCIENCE MASTERS PROGRAM ONLINE

6-MONTH ONLINE

# Welcome
## to the world of GreyAtom

**GreyAtom's Data Science Masters Progam - Online** is an intensive program with a 200+ hours curriculum designed around 6 data projects on real datasets.

This self-paced program will help you **learn advanced data science** where you'll be interacting with mentors across the globe.

At GreyAtom we are building a true blended learning experience where core learning happens on our **AI-based learning platform** & 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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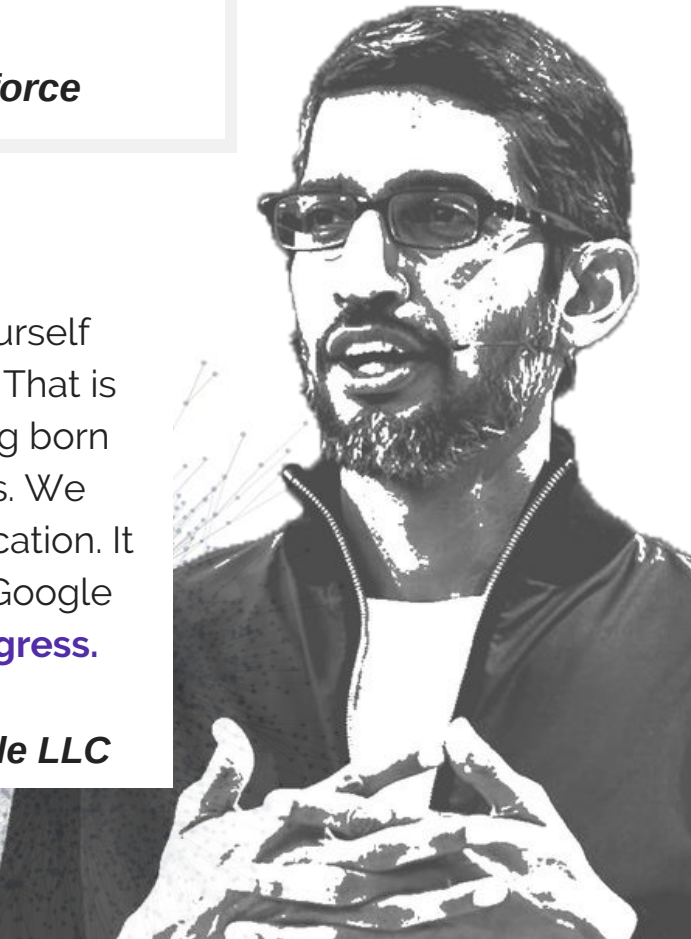
## WHY DATA SCIENCE?

"'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 - Online:** By the end of this program, you will be able to use Python for Data Science, summarize data for analysis, solve problems, implement, and evaluate data science problems by building appropriate machine learning models and algorithms.

- **8 Guided Projects**
- **276 Practice Assignments**
- **200+ Total Practice Hours**
- **43 Empanelled Instructors**

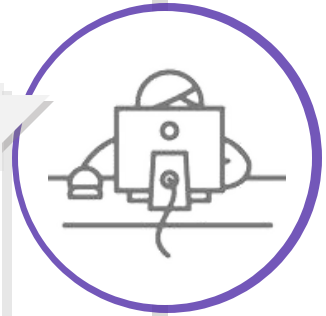
# Why GreyAtom?


## 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.

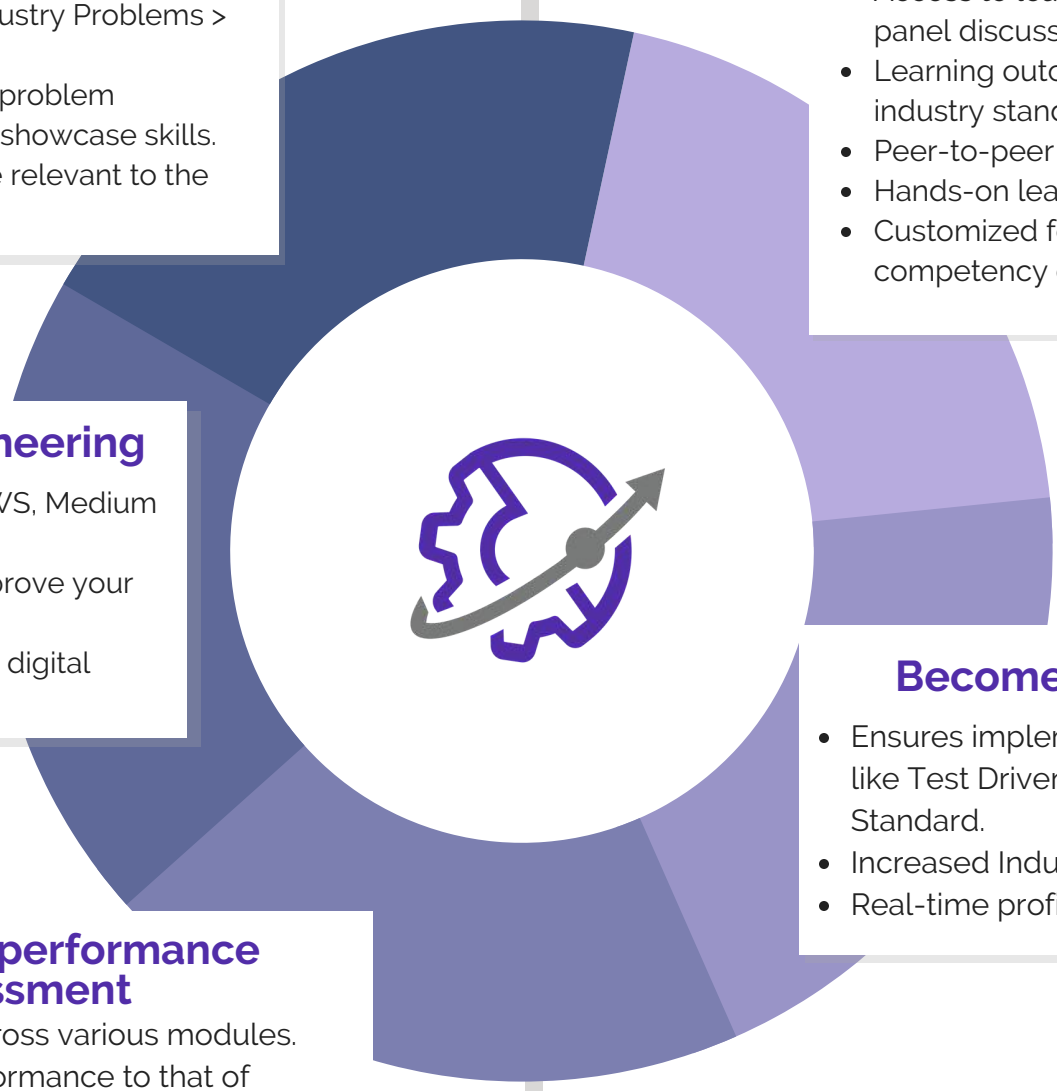
# Our Ecosystem

## 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 - ONLINE

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

| 6 | 15 | 28 | 8 | 250+ |
|---|---|---|---|---|
| MONTHS | LEARNERS PER GROUP | MENTOR-LED SESSIONS | PROJECTS & HACKATHONS | DIY ASSIGNMENTS |

# DSMP Online

In-depth

## Learning with a tribe

You will be learning with a small group of 8 equally motivated learners like you. We strike the right balance between large group instructions and give people smaller chambers of interaction for on-boarding applied sciences. Each group will be assigned a Data Science mentor. Plus, you also get exclusive solo sessions with the mentor.

## How do interventions work?

You will meet your mentor once a week to review your progress and resolve any queries you may have during you are learning.

Types of interventions

**Career related intervention**

- Mock Interviews
- Industry use cases and applications

**Concept on-boarding intervention**

- Code-along sessions
- Ask me anything sessions
- Guidance on how to learn a particular concept, query resolution

**Mentored hackathons & Capstone projects**

# 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

## Why Mentorship is the key?

Our mentors are data science practitioners who will guide you to achieve your learning goals, help you grow & share practical knowledge that they have gained over the years of practice.

** 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. CAPSTONE  PROJECT

# DSM-R
## At a glance



Week 1 - 3

### 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. Solo Project # 01**

Week 4- 9

### 02 FOUNDATIONS OF MACHINE LEARNING

1. Summarizing Data with Statistics
2. Introduction to Probability
3. Making inference from Data
4. Hands on Linear Algebra
5. Make your first prediction with Linear Regression
6. Regularization
**7. Solo Project #02**

Week 10 - 14

### 03 SUPERVISED MACHINE LEARNING

1. EDA and Data Pre-processing
2. Machine Learning: Logistics Regression
3. Improving your model with Feature Selection
4. Decision Tree
**5. Solo Project #03**

Week 14- 16

### 04 SUPERVISED & UNSUPERVISED ML

1. Machine Learning: Ensembling and Random Forest,
2. Gradient Boosting Machines
3. ML: Clustering/ k-means
4. Challenges in ML
5. Support Vector Machines
**6. Hackathon #01**

Week 17- 20

### 05 TEXT ANALYTICS

1. Foundations of Text Analytics
2. Topic Modelling on Text
3. Sentiment Analysis using NLP
**4. Solo Project # 04**

Week 21- 24

### 06 CAPSTONE PROJECT

1. Capstone #1
2. Capstone #2

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

- Getting started with Python
- Handling program flow in Python
- Manipulating data using NumPy
- Data wrangling with Pandas
- Data Visualization with Matplotlib
- **Solo Project # 01 - Analyse performance of different countries in Olympics from Wikipedia**

## Project 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.

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.

** 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.

- Summarizing Data with Statistics
- Introduction to Probability
- Making inference from Data
- Hands on Linear Algebra
- Make your first prediction with Linear Regression
- Regularization
- **Solo Project #2 - Predict the deposit amount next year for the clients of a bank.**

## Projects & Learning Outcomes

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.

- EDA and Data Pre-processing
- Machine Learning: Logistic Regression
- Improving your model with Feature Selection
- Decision Tree
- **Solo Project #3 : Predict the right fit for clothing based on customer data for an online fashion retailer.**

### Projects & 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.

- Ensembling and Random Forest,
- Machine Learning: Clustering/ k-means
- Gradient Boosting Machines
- Clustering/ k-means
- Challenges in Machine Learning
- Support Vector Machines
- **Hackathon # 1**

## Hackathon

After playing with dummy data sets during the program, you will be working on real data sets from the industry in this hackathon. Your skills will be tested based on the solution your provide to the business problem.

** 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.

- Foundations of Text Analytics
- Topic Modelling on Text
- Sentiment Analysis using NLP
- **Project #4 - Haptik - Classify a customer chat to guide him/her to the right business vertical.**


### Projects & Learning Outcomes

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.

## 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.

★★★★★

### 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

**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

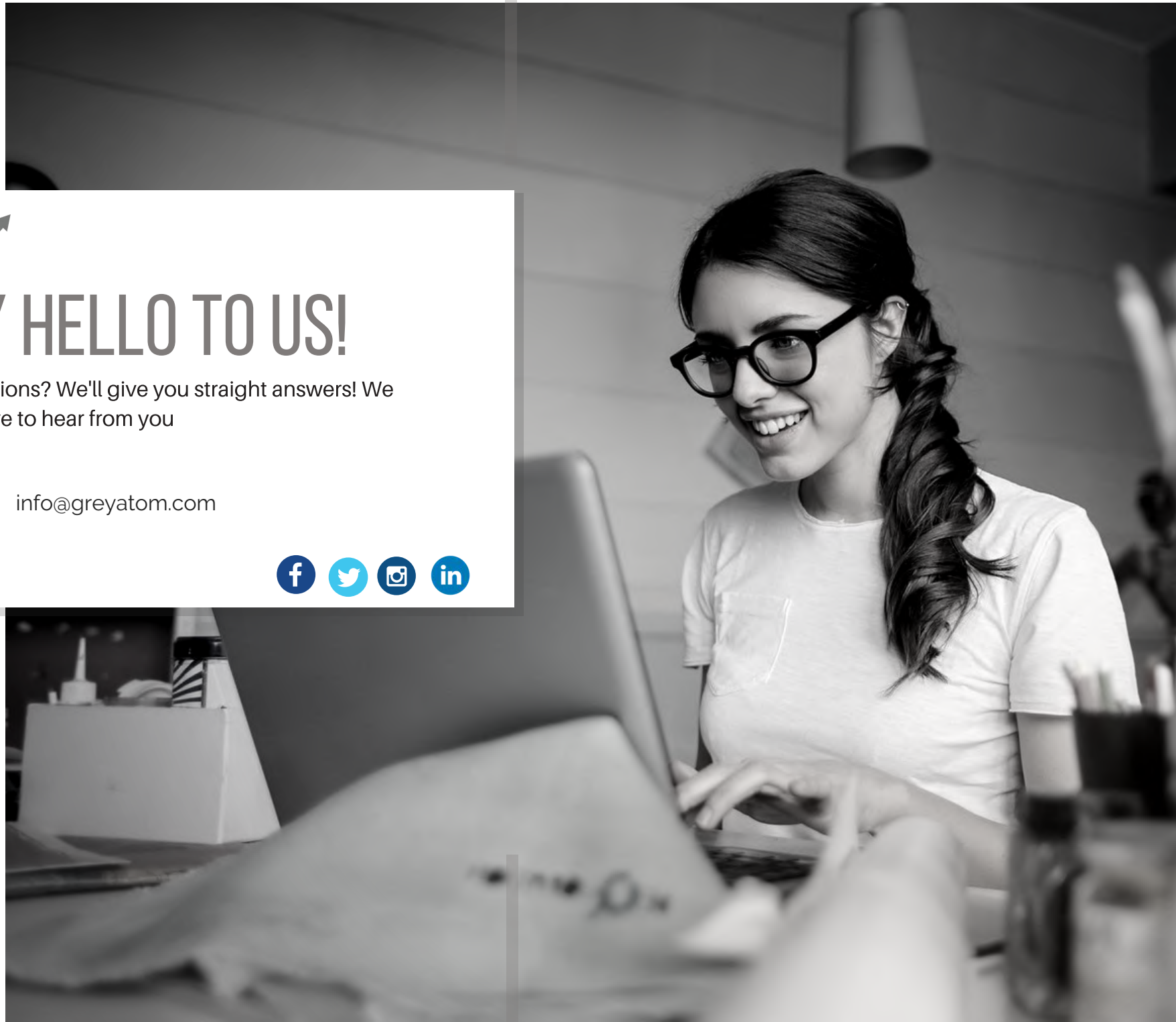
**396** Attendees

## 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