Jedha

Build your future in Tech

Summary

Jedha Bootcamp

Our mission & history

Founded in 2017, Jedha is a Bootcamp training provider 100% dedicated to the world Tech. We teach skills employers seek in the domains of: Data Analysis, Data Engineering, DevOps, Machine Learning Engineering, Cyber Security, Security Analysis of Information Systems, Data Science, Business Analysis and more.

These technical skills are increasingly in demand by all sectors: we deliver industry respected, intensive and practice-oriented training courses.

Make Tech accessible

Data professionals are increasingly becoming essential to all types of organisations. Securing that Data with Cyber Security skills and exploiting it with knowledge in Data Science, Data Analysis, or Data Engineering is very advantageous in the modern environment.

Since its creation, Jedha set itself the goal of allowing anyone who wishes to build technical competency in their field to acquire these practical skills. We wish to demonstrate that it is possible to achieve advanced projects & to acquire a large spectrum of skills in a limited amount of time. Our courses, developed by dedicated Data specialists and astute educators, enable the delivery of the best experience for our students.

#1
Data Bootcamp of Europe !

Antoine Krajnc, founder of Jedha

Founder & CEO of Jedha

Graduated from Audencia Business School and of UC Berkeley, Antoine has worked as a Business Analyst in San Francisco and in Paris for over 3 years. He then founded his first company, Evohé, which he sold in order to return to Silicon Valley and found the Data Science course of Product School, the biggest bootcamp of product management in the US, which he taught for over 2 years. He is now Founder and CEO of Jedha.

"Tech jobs are evolving way too fast: we want to train for expertise in a domain, more than for a given job"

Constantly evolving professions, academic excellence

Jedha certificate

Jedha also delivers a certificate called RNCP, meaning 'National Repository for Professional Certification'. The certificate lists all the training courses certified by the French state. The equivalence is Bachelor / Graduate: "Designer-Developer in Data Science"

The certification is recognised by the French Ministry of Labour and allows you to better justify your qualifications required by companies.

This French state recognition attests the pedagogical excellence of the training we provide, to always be in accordance with the pre-training level of our students, their professional objectives, the expectations of companies and the market.

Excellence

The Tech industry is always evolving, with its professions and technologies. As such, our training content is being constantly updated under our: technological, scientific, pedagogical and ethical lenses.
Between its creation in October 2018, and today, there have been more than 1500 iterations that have been made to the Fullstack Data program and more to come! Evolution is constant.

How our programmes are developed?

At Jedha, our training is all built around practice: our teaching philosophy **is all about project realisations**, while you maintain theoretical excellence, to understand the global environment.

Our programs are conceived by level:

Essentials
Learn the initial tools needed to grow in the Data or Cyber Security industry

Fullstack
Become a professional in the Data or Cyber Security industry & if that's your ambition – get hired!

Lead
Explore the expert level and develop on the most specialised skills.

Data Science is no longer the only ‘Must Have’ skill, the need for Cyber specialists is growing

In the Tech universe, all domains converge but the basis of all infrastructure is data. In all these areas of Data & Cyber Security, many jobs overlap and evolve, which is why the transversality of skills is very important in our trainings. Currently our graduates take positions such as: Data Scientist, Data Analyst, Data Engineer, SOC Analysts, Cyber Security Consultant and more but at Jedha we teach domain expertise, to equip our students with a broad skillset that can evolve with the industry.

> AI professionals are more and more required to have skills that touch the entire data pipeline. A Data Scientist who knows how to deploy is a great asset for any Tech team.
>
> **Guilhem Sarcy - Lead Data @ Host’n’fly**

Manage the entire data pipeline

Tech jobs are becoming more and more numerous and programming skills are sometimes considered a neccessary skill recruiters are looking for across a range of industries: finance, marketing, consulting, projects, media, **many jobs are impacted by the data boom.**

The recruitment market in the Tech sector is evolving, and it is not only technical specialists who are in demand. This is who our Essentials courses are built for: to train business backgrounds but also technical ones.

3.5 million needed jobs in Cyber Security

...and growing daily. Managing a data infrastructure also means protecting it! Master all aspects of Cyber Security in our complete program. It’s an increasingly critical domain.

+605% cyber attacks since before the health crisis*

An huge increase that reflects the need for talent in the sector. Prevention of attacks, knowledge of good practice to detect flaws in information systems and more - the scope of possibilities in Cyber Security is immense.

Hot Tip: Cyber attacks do not only target enterprise: **77% target small businesses!**

Individuals are also targeted: 90% of Cyber attacks arrive via email.

*in the 2nd quarter of 2020 (compared to the first quarter) according to a report from McAfee, a U.S. computer software management company.

Teaching methods

Intense

Inspired from the American teaching model, our bootcamp enables the delivery of the best educational experience to all of our students. While “learning by doing” in an intensive educational program, they also benefit from the opportunity to join an active community full of professionals passionate about Tech.

All backgrounds welcome!

Jedha graduates have come from a wide range of professional backgrounds. This is something we are proud of as a team! Reconversion, business creation, skills improvement, your objectives can be many: it is our mission to take into account your initial level and work with you to help equip you to build the life you desire.

Adding vitality and life to our community is of high priority to us. We are constantly hosting events, conferences, career seminars, discord discussions and so much more!

Learning by doing

The completion of Tech projects is at the heart of our teaching methods. These projects will demonstrate some of the ways that Cyber Security & Data concern all sectors and give you the opportunity to apply everything you have learned. These real world examples give our students the ability to connect some of their personal or professionnal interests to a Tech project of their choice. Some examples of projects are found in the program pages of this syllabus!

Lifelong learning

We believe that learned skills must still always be updated despite the fact that your course may have finished. This is the role of JULIE, your tech training platform (more information on page 29).

We are constantly updating our content and students and alumni of all our programs have access to the online course content with its many other learning resources for life!

Jedha's typical day

Practice, practice, practice! Simple exercises to get started followed by more complex exercises and projects to be carried out. The goal is to build a complete portfolio, appreciated by recruiters!

1

Theory and Live Coding

This is the time to address the fundamental theoretical concepts so you can fully understand how the algorithms you are going to use are constructed. Mathematics, statistics, probabilities but don't be afraid! Foundational reminders are regularly delivered and there is no lack of illustrations made by our teachers. The Live Coding part will follow! Complete the first exercises supported by your teacher and Teachers Assistants to dive directly into the practical part!

2

Time for more advanced exercises!

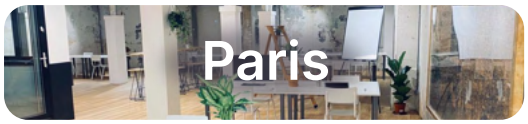
So many exercises for 1 concept! 30% theory, 70% practice, no more, no less. More advanced exercises are completed and that is where your Teacher Assistants come in to help you when you're stuck. The idea behind all this? Empowerment & autonomy! The Tech world is changing very quickly: getting the best advice on Stack Overflow and knowing how to do the right research is an integral part of the life of a Data & Cyber Security professional.

3

Experience through projects

Supported by your Teacher Assistants, it's time to move forward with your Tech projects!
There are many reasons to carry out those projects: They allow you to build a comprehensive portfolio (highly appreciated by recruiters) and demonstrate your technical skills in real world useage cases. Just one demonstration of our practical approach to education.
During Jedha programs, you will have completed no less than 15 Data projects.

Our campuses

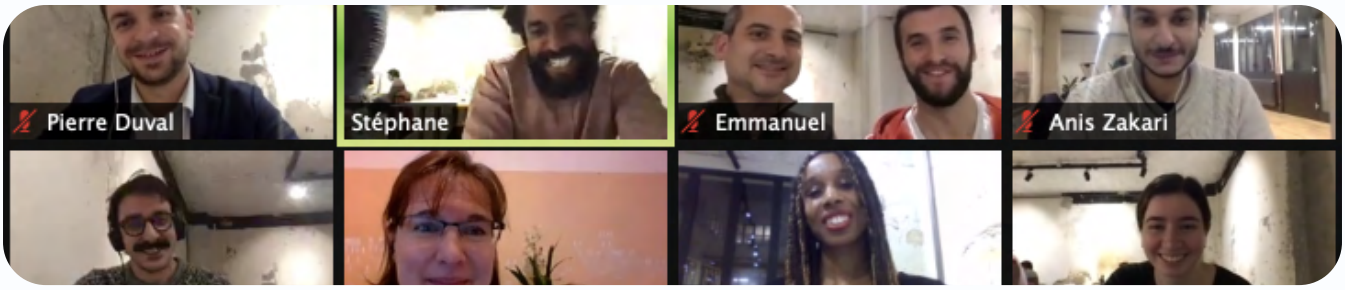


Jedha's HQ, located in the heart of the 3rd district! You will enjoy a spacious and beautiful environment to boost your skills.

Our Lyon Campus is located in the centre of the city, in the 2nd district. You will be able to meet all our partners in Lyon!

Located in one of the most dynamic districts of the city, the trainings delivered at Jedha London will allow you to achieve your goals in the Tech industry.

Join our lively campus in Lille! You will enjoy a great work environment with your teacher assistants and Jedha team to help you build a solid network.



Remote or in-class training

All our sessions are delivered in hybrid format. Our students can choose to attend the course in class or remotely. You can also alternate between in-class, and distance learning as your schedule demands.

How does a distance learning course work?

1

Zoom

Your courses are recorded and replayable! Zoom remains a real classroom, whether you want to have group or one-to-one time with your teacher.

2

Julie

All your course content (and much more!) is available on JULIE. A dedicated coding environment, complete course libraries, JULIE is your go-to!

3

Discord

Best practices, career or technical advice, stay in touch with professors, alumni & recruiters on Discord! Webinars, FAQ, Demodays Lives, the school's life never stops.

Hybrid format

What our students think

> The Fullstack full-time training was really great! It was very well organised: nothing to complain about! All theoretical aspects are quickly consolidated by practical applications, the teachers are really cool, and the final project is a great opportunity to put everything we learned during these 3 months into practice! A big thanks to the whole Jedha team!

Lorenzo Camus - Data Analyst @ EY

> I really enjoyed this Essentials training. The training is intense and gives you a good general vision of Data Sciences. I have now a better understanding of the skills that employers may be looking for in their job postings. In addition, we have an access to a community and many other resources to deepen our knowledge. The Jedha team has enabled us to work in good conditions both in the classroom and remotely.

Benoît Vilar - Financial Controller @ Société Générale

A word from the GM

Caleb Isaacs, General Manager London

We understand that modern life is complex and so our hybrid training format is designed to remove barriers to attending our courses.

Hybrid to us means “working for you” so you can come into class or study remotely as convenient. For remote classes, you’ll discover that our teachers are excellent at using our tools to ensure your remote learning experience is just as impactful as if you were in class.

Your training tracks

1 School, 3 Training tracks

Are you currently working?
All our training courses are delivered on a full-time and part-time basis.

Data and/or Cyber Security? Both disciplines are crucial to the modern operating environment. Select a track or study both and become a real Tech master!

30 % theory,
70% practice !

Data

Essentials - Page 11

Get started!
Become completely autonomous and competent in Data Science, and manage **your first Data project**

Fullstack - Page 15

Master the whole Data pipeline, from data collection to the deployment of complex models. **11 Data projects** to be carried out in this program alone

Lead Coming Soon

The highly requested double skill Data Science & Data Engineering! Reach the third and last stage of the rocket with the Lead course, 2 **Data Engineering projects to lead!**

Cyber Security

Essentials - Page 25

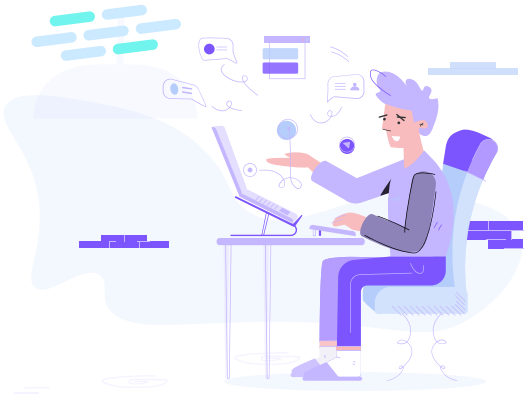
Discover the world of Cyber Security and learn the basics of IT infrastructure protection

Fullstack Coming Soon

Become a true ethical hacker and master all major areas of Cybersecurity through a comprehensive and structured program to get hired in Cyber.

Career support

Our mission? Help our students achieve their professional goals. From **technical interviews to career advice**, we accompany our students through their training and recruitment with our partner companies. **Career events** are also organized throughout the year!



Data Essentials Overview

No technical prerequisites to be autonomous and operational

Part time or full time, what suits you?

40 hours of training: your first Data project and many practical exercises!

Goal

To give you a solid foundation on which to **build or evolve** in the Data universe. Do you wish to obtain skills across the entire Data pipeline? You can continue with **the Fullstack course and then the Lead course!**

You wish to discover the Data universe? Get started!

This program was thought and designed to **demystify Data Science, we want to overcome the opaque image that AI can often have.** The objective is clear: to help you discover the world of Data Science, its potential and its applications by practicing it at all levels.

From simple lines of code to your first Data Science project - join the technical side of the force!

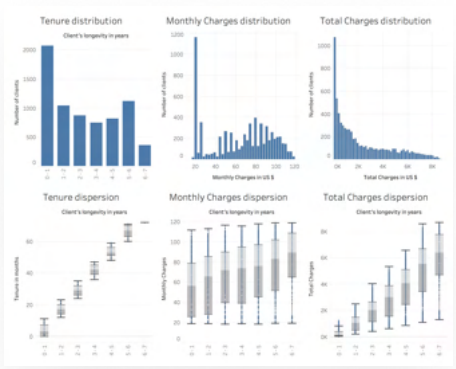
Data Essentials Syllabus

MODULE 1
Data visualisation & Data mining

Start with one of the Data Mining and Data Visualisation tools: **Tableau**.

Learn how to import data into Tableau and to **present dashboards to non-technical people**, like for instance how to illustrate performance in a data set.

You will get the first brief on your **final project**, which you will carry out throughout your training, and will understand why this exercise can really make a difference in the Data job market.



+ a b l e a u

MODULE 2
SQL - Database management

Subqueries, joins, aggregation functions, you will have **all the tools to manage data**, and you will **master SQL**. This language allows you to manage databases. We will introduce you to **Cloud Computing** with Google Cloud Platform!

You will learn how to **connect databases to each other**, and how to quickly retrieve the most important and relevant information for your analyses.

IMDB, sports world cup, financial data: work on real datasets to carry out your **first analyses.**

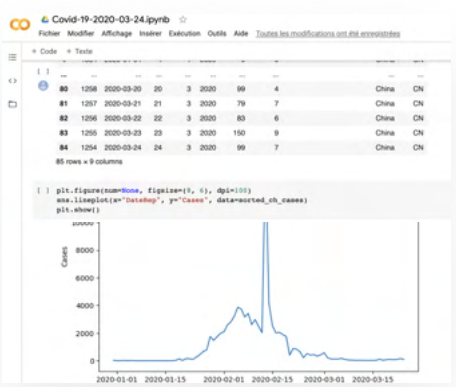
MySQL Google Cloud

MODULE 3
Python - Statistics

Let's get into the **Python programming:** you'll be practicing on **Jupyter Notebook** thanks to the integrated workspaces of our learning platform JULIE!

You will quickly learn the coding best practices, with its libraries - **Pandas, Numpy, Seaborn, Matplotlib** - and development environment.

We'll go over some **statistical** basics to make you comfortable with the rest of the training program. You will work on business & trade uses cases!



jupyter python

Data Essentials Syllabus

MODULE 4

Python - Web Analytics

Another possibility offered by Python: **Web Analytics**. You will see how to build **A/B Tests** to perform your analyses, and use the Pandas library to manipulate your data.

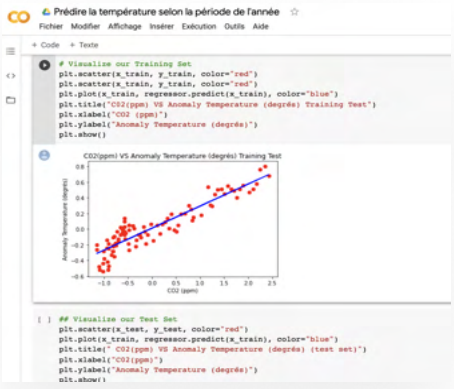
Websites, mobile applications, marketing campaigns, product launches, you will understand one of the (many) applications of Python. You will also get familiar with the **syntax of the language**: concrete business decisions are at stake!

MODULE 5

Machine Learning: Regressions

Let's explore **Machine Learning**! You will learn what is this **sub-domain of Artificial Intelligence,** how it works, and practice the most popular Machine Learning models, starting with **linear and logistic regressions** in Python with the **Scikit Learn** library.

Linear regressions? Logistic regressions? You will learn how to make predictions! **Personal interest, profession, or intellectual curiosity**, you will be able to practice on all fields of operation!



NumPy matplotlib and Seaborn pandas scikit learn

Data Essentials Syllabus

MODULE 6

Machine Learning: Classification

In this second module of **Machine Learning in Python,** you will learn another type of model that is widely used in Data departments: **classification**. You will create population groups from your data.

You will use the **Decision Tree & Random Forest** models to do this, after learning the statistical dogmas behind it all!

MODULES 7 & 8

Data Science Project!

Now is the time to present the final project of your program! A first project **carried out from A to Z** that will bring together everything you have learned during your training!

You will collect the data, then pre-process it before drawing useful insights for business issues. You will then set up your **Machine Learning model of regression or classification**, before presenting it with **Data Visualisation tools.**

Applying data science to the subject of your choice, with regards with your professional environment or your passions, is a very good exercise to lock in the lessons you've learned.

Recruitment: **match** applicants and recruiters

Boston Marathon: **predict** the arrival time

Podcasts: **recommend** content on iTunes

Banking: **predict** repayment defaults

Healthcare: **predict** no-shows to medical appointments

Marketing: **predict** the success of a marketing plan

Data Fullstack

Overview

A complete portfolio! No less than 12 projects completed during your program.

Prerequisites? Python & SQL basics or have followed the Essentials.

420 hours of training: 10 modules and 12 advanced Data projects - a complete portfolio

Goal

To equip you to become a data professional that's capable of solving complex problems in organisations. This will enable further Data positions to be possible for you (Data Scientist, Analyst or even Data Engineer, Machine Learning Engineer...)

Master the entire pipeline!

But which pipeline are we talking about?
This program has been designed like a Data project carried out in a company!
Let's follow the four main steps of a Data project. These steps will then be fully explored in 10 practical modules for this complete training.

1 Let's start the Data Pipeline with the **Data Collection phase**, allowing you to collect data from any source and then store it in your Data Warehouse: you'll build your first Data Engineering skills!

2 You will then move on to the **Data mining phase:** In order to draw the first insights that will guide your analyses, especially in the context of a very large amount of data, we will address the Big Data issues.

3 Then come the skills at the heart of Data Scientist's business, used to **exploit the data**. You will master Machine Learning & Deep Learning. Artificial Intelligence will have no more secrets for you with three dedicated modules.

4 Time to **deploy your models into production**! You'll learn how to build a web application in which to integrate your model, and then you'll learn how to deploy it in the Cloud so that everyone can access the results of your AI model.

Data Fullstack Syllabus

MODULE 1 - 3 DAYS

Python Upgrading

Level up before we travel into the Data Pipeline and master programming in **pure Python**. The goal is to make you proficient on different environments, so you'll comfortable with complex programming concepts such as **Object Oriented Programming** and to learn good code practices following the **Pep 8** convention.

You'll also learn how to collaborate and manage Data projects with **Git and GitHub.**

Well-written code? Your future colleagues will love you.

GitHub python git

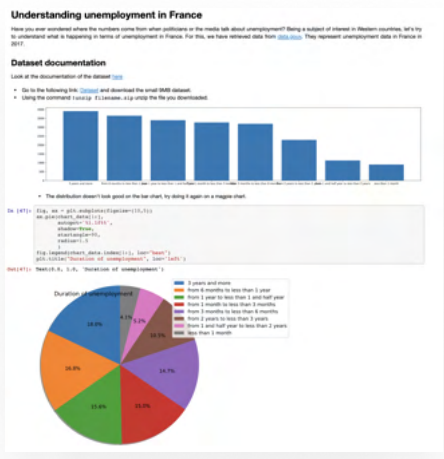
MODULE 2 - 4 DAYS

Exploratory data analysis (EDA) Exploration

In this module, we will tackle the **Data Manipulation and Data Visualisation** phase. The goal is for you to be able to explore a dataset you don't know to get the most relevant information from it. You will then master libraries such as **Seaborn and Matplotlib** allowing you to start your first analyses.

You will also learn how to make **interactive data visualisations** with **Plotly,** before concluding this module using geographic visualisation (GeoData) with **Bokeh**.

On completion you will now understand how to apply the concepts of descriptive statistics to carry out your analyses.



plotly bokeh matplotlib and Seaborn

Data Fullstack Syllabus

MODULE 3 - 4 DAYS

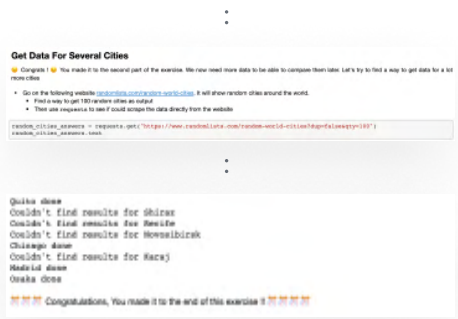
Data collection & management Collect

In this module, you will learn how to collect data from any source and store it in your Data Lake.

You will first practice **Web Scraping**, in order to extract web data via **Scrapy**.

In the second part, you will acquire your first skills in Data Engineering! We'll introduce you to the **AWS** cloud (Amazon Web Services) and its **Data Storage** services. You will learn how to create your Data Lake via S3 allowing you to store raw data.

Finally, you will create **ETL (Extract Transform Load) processes,** allowing you to extract the data, before pre-processing it and then loading it into a Data Warehouse. After the next module, a quick reminder on SQL to manage your Big Data issues.

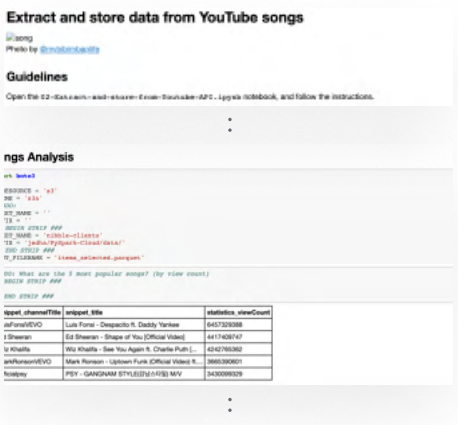


MODULE 4 - 5 DAYS

Big data problems Exploration

Once the data has been collected and stored, you will have to manage all its volume and infrastructure. You then tackle all the computing and **distributed storage issues** related to Big Data. You will also be handling data hosted in Amazon **S3 buckets.**

We will introduce the Big Data concepts with the different technologies around **Hadoop** before attacking the very popular **Spark Framework** in which you will immerse yourself in the **SQL language**. You will go further in your understanding of Data Warehousing to store data once it has been processed using **Amazon Redshift.**



Data Fullstack Syllabus

MODULE 5 - 9 DAYS

Supervised Machine Learning Exploration

Now that your Data infrastructure is well consolidated and robust, you will be able to build powerful Machine Learning models on top of it. Let's start these modules with supervised Machine Learning. **What is its purpose? To make predictions about a given phenomenon.**

You will learn how to **use** but above all how to **evaluate** the most efficient models according to the problems that need to be solved. Which algorithms?

1. **Linear & logistic regressions**
2. **Decision trees Random Forest**
3. **Naives Bayes Classify**
4. **Support Vector Machine (SVM)**
5. **XGBoost**

You will learn the best practices to choose the **most suitable model for your data** and avoid **overfitting** (a Data Scientist's worst enemy). You will also master the **fine tuning** techniques that allow you to increase the performance of your models.

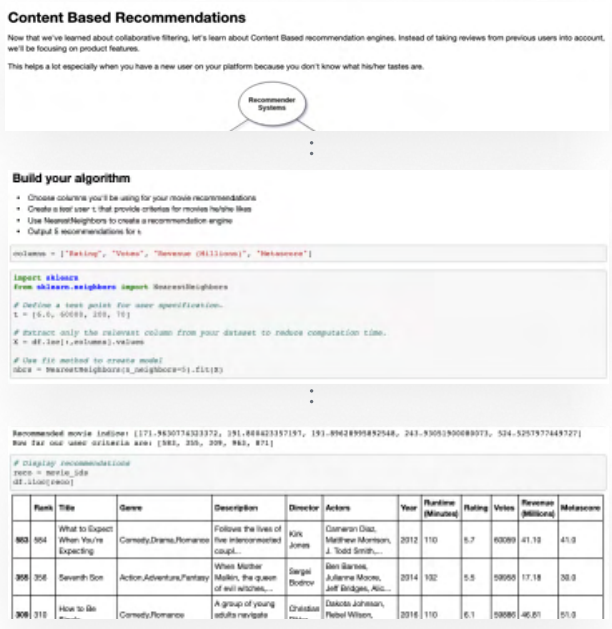
MODULE 6 - 8 DAYS

Unsupervised Machine Learning Exploration

The purpose of Machine Learning is not only to make predictions of a phenomenon, but also to be able to create groups of people or similar elements: clusters. A newest use case? Geographical **clusters** detected during the 2020 coronavirus crisis!

In this module, you will study these models:

1. **KMeans**
   The most popular algorithm for unsupervised Machine Learning
2. **DBSCAN**
   Powerful density-based algorithm
3. **LSA & Nearest Neighbor**
   Very often used for engines of recommendations!
4. **PCA & LDA**
   Analyse a Dataset composed of many variables



With all these Machine Learning algorithms practiced, you will be able to better comprehend the next module going further in modeling: **Deep Learning!**

Data Fullstack Syllabus

MODULE 7 - 10 DAYS

Deep learning Exploration

Get as close as possible to what Artificial Intelligence is with this 10-day program dedicated to Deep Learning. By making models even more complex, you will be able to process unstructured data such as **images**, **text** or **sound**!

We will start by reviewing some very useful mathematical basics in these advanced Machine Learning approaches, especially with the concept of **gradient descent**.

We will then study classical neural networks, **convolutional neural networks (CNN)** used for image management and **recursive neural networks (GRU & LSTM)** which are used to manage sequential data such as video or text.

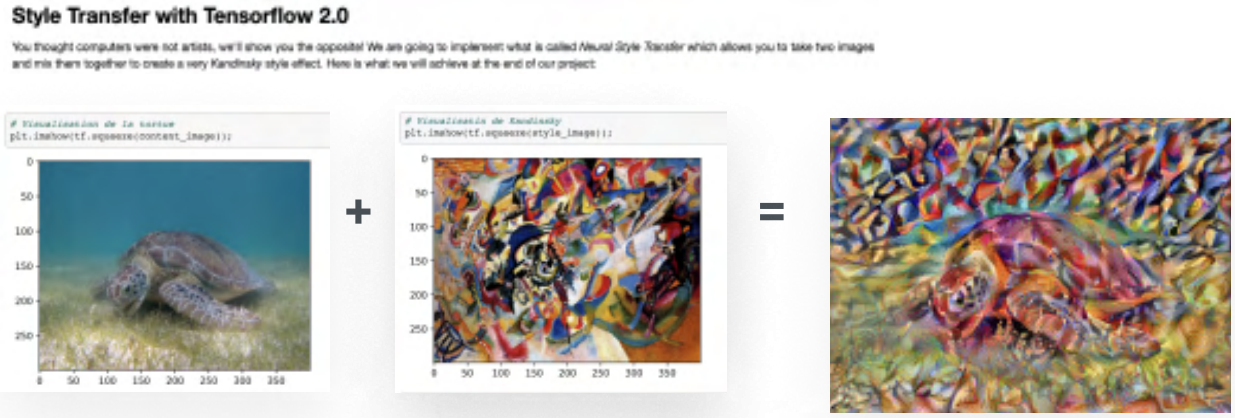
We will focus on imaging techniques, but also on text, with **NLP (Natural Language Processing)** techniques where use cases abound today. (see Fullstack Projects Section)

You will be able to create GANs (Generative adversarial network), models that confront two neural networks. An application case? The creation of images from a single input text!

This module aims to be one of the most ambitious in Data education today. You will discover how **state-of-art** Deep Learning can make huge impact in your business or career projects.

spaCy CO TensorFlow

Now that we know how to build high-performance algorithms, **it's time to deploy them into production so that their results are accessible to everyone!**



Data Fullstack Syllabus

MODULE 8 - 6 DAYS

Deployment

Going into production

Today's business challenges are both about the construction of algorithms and their deployment. This is why it is important that you are skilled across the entire Data "stack".

It is important that you master these release skills as they are hugely advantageous with recruiters and employers.

We will first learn how **Docker** works and how to standardise environments. You will then start a Web Development panel by building interactive dashboards with **Dash** to include the results of your AI models. **MLflow** and **Amazon Stage Maker** will allow you to deploy algorithms on production environments in the Cloud, accessible to anyone.

With the knowledge you will gain by building **APIs with Flask**, and creating web applications with **Streamlit**, you will also be ready to deploy your app with **Heroku**! Share the public link of your app with your professional peers, they will be impressed.

After this module, you will be able to build strong templates, to deploy them and use them to create **fully AI-based applications**.

docker kubernetes mlflow HEROKU Flask Streamlit

MODULE 9 - 3 DAYS

Career Coaching

Data career

The purpose of these 3 days is to work on your **Personal Branding**. Whether you are retraining, changing career, looking for freelance work or setting up your Tech project - this module will be extremely useful.

You will be able to benefit from the experience of our coaches, who will guide you in sharpening your Curriculum Vitae, your LinkedIn and helping you to improve the way you present yourself on your professional networks. This module will give you the tools to really stand out at interviews.

On completion of your course you will also be able to join Jedha's Career board, a new tool of ours that allows you to connect with recruiters and share your technical skills easily.

Data Fullstack Projects

MODULE 10 - 10 DAYS

Data Project & Demo Days

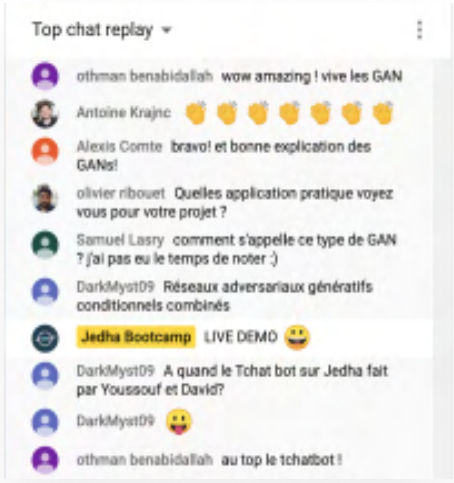
Data Career

One of the most exciting parts of the course, **Demo day**!

After having built up a complete portfolio during your bootcamp, you will conclude your course by presenting your final project in front of all our partners & partner recruiters!

You will have **10 days to work on the project you choose**, whether it is entrepreneurial or personal. You can also take advantage of projects from your own companies or from Jedha's partner companies. You will work **alone or in a group**, coached by your teachers, to present this project.

A very interactive and rewarding way to complete your Fullstack training before continuing on the Lead course or fully entering the Data industry.



Meet our students and their teachers during Demoday on our campuses! Can't attend in person? Our Demodays are also broadcast live on Youtube and their replays remain accessible on the Jedha Youtube channel.

YouTube LIVE

Examples

Create an engine for recommendation of cooking recipes

Optimise your strategy for sports betting

Detect skin cancer from pictures

Recognise & identify sign language on video

Predict the evolution of a stock market index based on news

Reduce the carbon footprint of human activity

Data Fullstack Projects

Evaluate your skills

Manage your skills development with the eight Fullstack training quizzes. These quizzes will cover the concepts seen in each module of your training.

Directly included in your JULIE platform, these quizzes will allow you to evaluate your knowledge and to help our team support you to excel.

General concepts, short exercises, you can test yourself on both theory and practice.

All your training projects

Soon enough, you will notice that **technical skills are perfectly demonstrable by projects.** Presenting a complete portfolio of projects to recruiters is the best way to distinguish yourself! **No less than 12 projects will be carried out during your programme**, including a final project of high ambition.

These projects are based on real business cases and problems that you will have to deal with in your Data career.

Build a quiz

For this first project, we will review Python and build up your skills by developing a team quiz. You will push it on Github to build the **first block of your portfolio.**

3 days

Speed dating

A perfect dataset for EDA! You will be able to explore your Dataset and try to find the factors that determine a second date.

4 days

Data Fullstack

Projects - Modules

Music data mining

For this Big Data project, we have a highly unstructured **multi-million line** Dataset to manage. You will need to use Spark, asynchronous Python queries and your knowledge of data storage to complete this project.

5 days

Scraping

The goal of this project will be to have you scrape web data, structure it and store it in a Data Lake.

4 days

Fraudulent activities

The sixth project in your portfolio! With this Dataset, you will need to understand the factors that influence bank fraud.

3 days

Conversion rate

First Machine Learning project! You will have to predict a conversion rate on web data. Extremely useful for marketing.

3 days

Recommendation engines

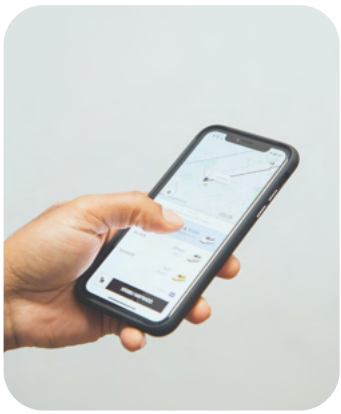
Create recommendation engines thanks to unsupervised Machine Learning! In this project, you will build two types of engines: content-based & collaborative filtering.

2 days

Uber pickup

Your first unsupervised Machine Learning project: You will need to recommend to your Uber drivers their geolocation based on the time of day to maximize their revenue.

3 days



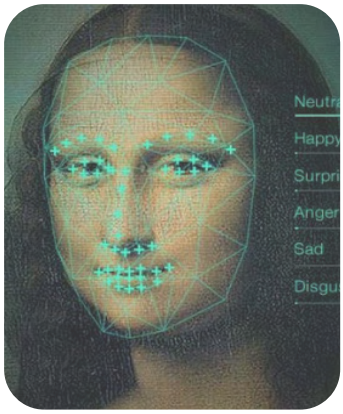
Data Fullstack

Projects - Modules

Object detection

Let's get closer to AI core! During your Deep Learning module, you will have to create an algorithm to detect objects on an image!

6 days



Translator

Second part of Deep Learning, you will build a powerful translator based on attention mechanisms.

5 days

Web dashboard

You will build a web application that will report the performance of a Machine Learning algorithm in the form of a dashboard. You will then put this Flask application into production.

6 days

Demoday

Your final project! You will be free to work on any data set you choose. You will have 10 days to prepare to present it in front of an audience & live on Youtube.

Fullstack teaches you the skills of a Data professional and equips you with the abilities you need to secure a job in Data: (Data Analyst, Data Scientist, Machine Learning Engineer etc.)

Cyber Security Essentials

Overview

No technical prerequisites Required, just preparatory work on JavaScript

Part time or full time, options to suit you!

50h hours of training: your first Cyber Security project and many practical exercises

Goal

Manager, employee, entrepreneur, job seeker, career changer: If you are looking to retrain or simply upgrade your skills and if you have little to no basic knowledge of code but are interested in Cyber Security - embark on our Essentials course.

In this technical training, there are no prerequisites! The objective of this course is to help you discover the basics of Cyber Security, in order to learn the best techniques necessary to protect an infrastructure.

“Cyber attacks? It happens to everyone else, but not to me “

This program has been built with the idea of **democratising Cyber Security because we want to go beyond the image of the “mysterious black box”** that this field can often reflect.
The is to help you discover the first application cases of this universe and its potential by ensuring the discipline is understood at any level. From the command lines on your Terminal to your intrusion test – **join the technical side of the force!**

Our approach: Ethical hacking

The “Penetration Testing” approach is to ‘attack’ an infrastructure to better detect its weaknesses: this is the fundamental behind a **“white hat hacker” or an “ethical hacker”**.

80% of cyber attacks arrive through emails and are the result of: social engineering, the art of recovering confidential data through psychological manipulation of others (via a phone call or email).

Let’s study together all these concepts in a complete introductory program.

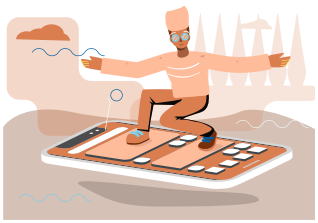
Cyber Security Essentials Syllabus

MODULE 1

Cyber Security & networking

Let's start with the first concepts related to Cyber Security!
In this first module you will learn how to use the CIA triad model (the 3 criteria of data sensitivity: Availability, Integrity and Confidentitality), the **Defense-in-Depth** (risk management related to data exploitation). Discover also the **OWASP** community (promoting web application security) to raise your awarness of Cyber Security issues.

Then we will proceed to the **Networking** part where you will understand how a network of machines works and how to use it via the Shell and Vim commands.



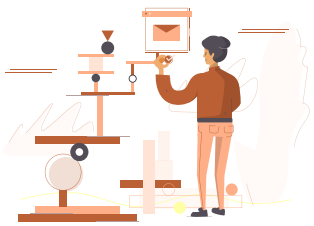
MODULE 2

Risk assessment & footprinting

The first step in securing your company is to assess the risks that are exposed to in order to better manage them.

We will learn how a Cyber Security team is organized in **SOCs** (Security Operations Centers), how it can assess the risk and prevent possible threats.

You will also see how to gather information on a potential target with **Nmap** (detection of open ports, identification of hosted services to obtain information on the operating system of a remote computer) and how to protect them using **VPN's** and **Proxies**.

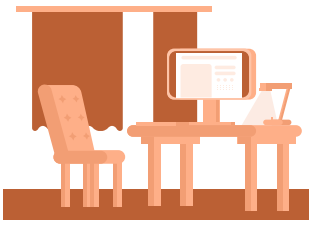


MODULE 3

Exploitation

Once you know how to collect information about a target, you can exploit it! In this module, you will see how to perform **Penetration Tests** with **msfconsole**, allowing you to test and execute your code.

You will learn how to exploit flaws in a system by utilising well-known vulnerabilities such as Bluekeep. You will see how to take advantage of human weaknesses through **Social Engineering** techniques and how **backdoors** (illegitimate access to software) are installed which allow hackers to exploit a system without being detected. You will also learn how to defend against these attacks with URL recognition, encryption and patching.



Cyber Security Essentials Syllabus

MODULE 4

Web Penetration

A **website** is the ABC for any organisation that wants to be able to promote itself. As such, websites are very good targets for any hacker. For this reason, in this module, we will cover everything related to the exploitation of vulnerabilties in a website.

We will practice the **SQLcommand injection** and **Javascript code** to take partial or complete control and extract information from a server. The idea will be of course to know how to protect oneself from all these attacks. We will also learn how to **hack Wifi networks** to perform **Man in the Middle** attacks (intercepting communications between two parties without them realising it) in order to recover sensitive information.

MODULES 5

Monitoring

From this module, you will build a firm knowledge of the potential flaws of a system that you may be dealing with in order to protect yourself as effectively as possible.

This is why, we will teach you to set up a monitoring and surveillance system to detect the flaws depending on the level of compliance that your organisation wishes to maintain.

We will see the use of tools such as **Splunk**, the organisation of **CSIRTs** (computer alert centers) and the different levels of compliance like **NIST** (cybersecurity framework), ISO/IEC 27000 or the RGPD.

MODULE 6

Cyber Security project - Real Life Pentest

Now it's your turn! To complete your training, you will use all your knowledge in Cyber Security to evaluate the infrastructure of a company of your choice or a Jedha partner.

With penetration tests, you will try to **detect potential vulnerabilities** in a real company infrastructure and **present a pentest report** to the Jedha pedagogical team.

Opportunities in Cyber Security

3.5 million vacant positions in Cyber Security worldwide!

Ethical hacking: the discipline that we embrace in all our Cyber Security training courses - being able to penetrate information systems to better detect and fix vulnerabilities.

Cyber Security remains a market with a lack of talent, where skilled professionals are highly sought after by recruiters from all kinds of companies.

Essentials

Cyber Security Project Manager

You will be able to understand and lead a team of Cyber Security analysts to successfully complete your projects!

Cyber Security Consultant

Work with companies in taking the first steps to build a secure infrastructure.

Junior Cyber Security Analyst

Get technical and lay the first blocks of a Pentest report to guide initial decisions.

CISO (Chief Information Security Officer)

Become a technical manager supervising a technical team. You will know all the Cyber environments that surround you.

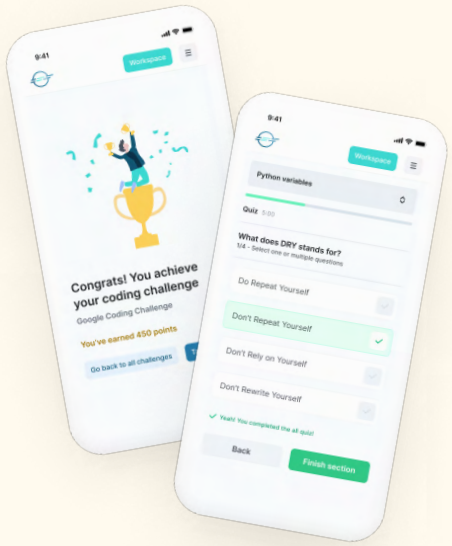
Fullstack

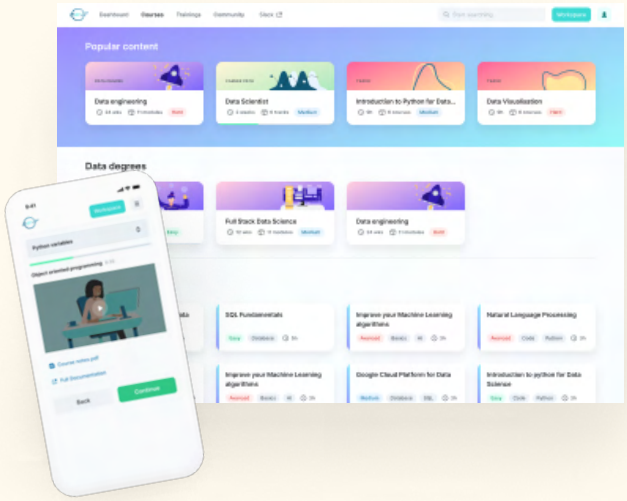
Coming very soon...

The best of Tech, delivered

Much more than a content platform...

The pre, during and post training are managed by our JULIE platform! Learning never stops... Given the ever changing nature of tech we always encourage our alumni to continue honing skills after the course. This strengthens knowledge and helps to focus on the skills they are interested in and will use in their professional operations.



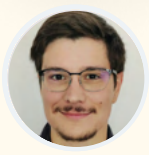


This is one of the reasons we built JULIE: to create a true virtual classroom. You will be able to enjoy **exclusive additional online resources as well as a 100% integrated code environment.** Access to JULIE is guaranteed for life and included with the cost of your Bootcamp.

What our alumni & teachers think

As a teacher, JULIE allows you to save a lot of time, and to work direclty on Data whithout thinking too much about infrastructure, a study module wich comes later in the curriculm. **JULIE is the perfect balance between the right amount of theory and exercises, and on new topics.**
I realised this when I wanted to discover AirFlow: I had been on JULIE and I found that it was one of the best tutorials I have ever attented.

Alexis Comte - Alumni & Jedha Master



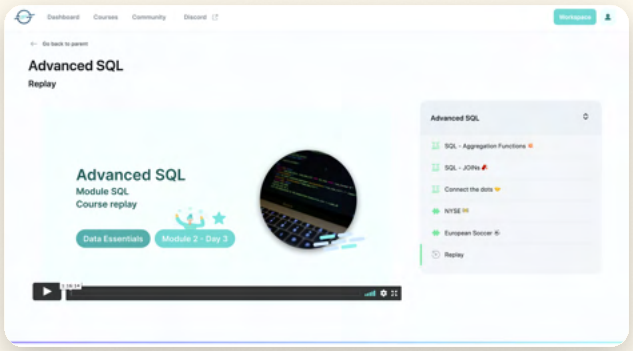
It's **incredible to have access to this coding environment without having to install anything: we practice much more efficiently!** And then at the slightest concern when working independently, we have a great number of resources available in the courses catalog on the platform. It's a huge advantage in our training, especially if you have an older computer.

Perrine Panisset - Alumni & Data Analyst

JULIE: Tech learning 3.0

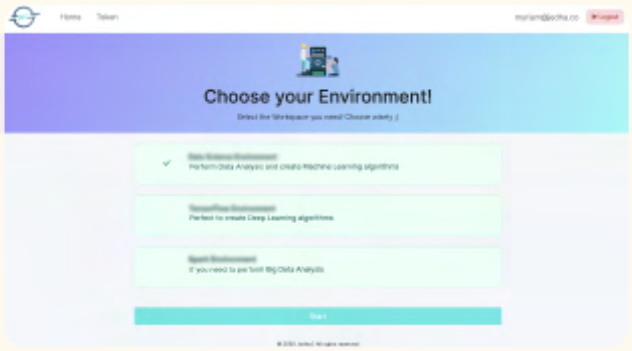
What you will find on your platform

Videos for all your courses available on the platform as well as written explanations of the theory, exercises & projects



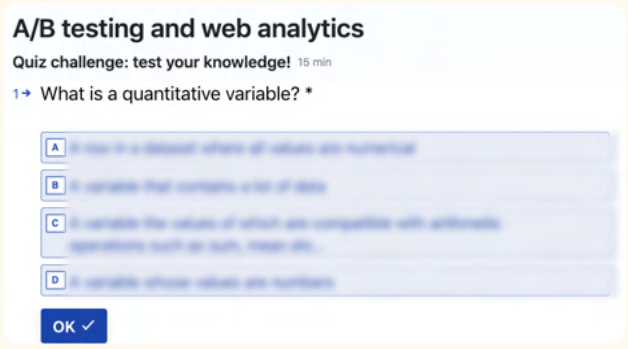
If you want to review one or more parts of your courses, it's here!

Coding has never been so **accessible** with JULIE's integrated workspace - **very few installations are required** on your computer to get learning



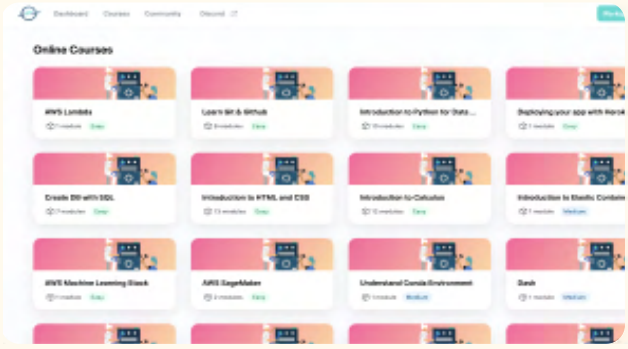
Depending on your needs, choose your coding environment, and let's begin.

Company challenges, flashcards, quizzes, dedicated projects, **everything you need** to keep track of your technical improvement.



After each course module, take your quiz to track your overall level.

Do you want to learn **a new skill**? Dive in JULIE's educational content catalogue !



More and more additional exclusive resources can be found on the platform.

Business Relations

Advanced tech skills are becoming increasingly required in all aspects of business. Ensuring our trainings are in alignment with industry needs is a foundation of the Jedha way. Our content team maintains an 'open-door' policy for any of our partners to discuss new technologies and technical needs as tech and jobs evolve.

We also can produce customised courses, specific to the needs of your business and team!

Recruiting our students

The Jedha job board allows you to see student test scores linked to public profiles (Github, Linked in etc.) and our team loves facilitating the connection between hirers and students.

Train your teams

Discuss with us the needs your organisation may have for technical training. We can tailor our courses or develop new programmes perfectly suited to your requirements.

Brands that received our tailor-made training programmes

The Community

Whether they are retraining or in career development, students who have just completed their training programs come from all sectors and are looking to acquire skills that are highly valued by recruiters. Some may be freelancers or salaried employees but they're all getting into Tech and we love having this shared passion in our community.

Past students have been recruited by these companies

ENGIE — **Abdoul Traoré**, Python Developer	data iku — **Hayet Bezzeghoud**, Data Scientist	HEETCH — **Stéphane Singéry**, Data Engineer
qonto — **Hugo Maurer**, Data Scientist	drivy by getaround — **Naeem Amarsy**, Data Analyst	sopra steria — **Cyril Bruno**, Consultant Data Senior
BNP PARIBAS — **Marilo Gil Ibanez**, Senior Data Engineer	spendesk — **Amina Nasry**, Data Scientist	foxintelligence — **Perrine Panisset**, Senior Data Analyst
cnrs — **Gaëlle Sellin**, Data Scientist	Kicck — **Adrien Dodinet**, Head of Data	JELLYSMACK — **Olga Kurnosova**, Data Scientist

And many others!

Your Jedha masters - Data

All of our teachers are working Data professionals who teach as well as work in the industry. They work in the biggest tech companies and are passionate about education. Career advice, best practices, networking and ability to demystify are characteristics all our teachers excel in. They are accompanied by Teacher Assistants, so typically you always have a ratio of one person from the teaching team for 7 students!

Charles Tanguy
Lead Instructor @Jedha

One of the authors of the Data Fullstack program! Trained at ENSAE - HEC, Charles has more than 7 years of experience as a Data Scientist in various sectors.

Mathis Linguer
Data Scientist @ BNP Paribas

Alumni of ENSAE, he earned experience as Data Scientist before bringing his expertise into the Data Lab of BNP Paribas in 2018.

Aurélie Mutschler
Lead Instructor @Jedha

Aurélie has a PhD in physics and a background in data processing. She has worked in several data labs in the scientific sector.

Andreea Turcu
Data Science Expert @Data Robot

Fullstack Data Science, Data Consulting, Solution Architect, Machine Learning Engineering, Andreea has many strings to her bow!

Alain Demenet
CTO & Machine Learning Engineer @ Jedha

The developer of JULIE, your Data e-learning platform! Alumni from 42 school, Alain also is passionate about popularisation of complexity in his teaching.

Antoine Nuttinck
Co-founder & Data Scientist @Signal Miners

The Deep Learning Specialist! After more than a year and a half at Partoo, he founded Signal Miners, specialized in Deep Learning signal processing.

Inès Ben Amor
Data Scientist @ C3.ai

Technical and business multitasking! Inès is working as Data Scientist & Product Owner, for Veamly, a company in the Silicon Valley.

David Raux
Data Analyst
Freelance

Teaching is his vocation! After number of experiences in Human Resources, he came to the technical side of the force by teaching.

Laurent Morelli
Co-founder & Data Scientist @Timelight

After more than 3 years as Head of AI at Matters Start-up Studio, he co-founded Timelight specialising in temporal data processing.

Adrien Acquistapace
Data Scientist
@Gendarmerie Nationale

Ex ENSAE - HEC, Adrien has been Data Manager for 3 years before joining the French Gendarmerie Nationale.

Guillaume Manderscheid
Data Scientist
Data Engineer

After two experiences lasting more than 2 years in San Francisco, Guillaume comes back to France to pursue his career as a Data Freelancer.

And even more on Jedha.co

Your Jedha masters - Cyber

The diversity of backgrounds among our Cyber Security teachers may surprise you but its an aspect we are proud of. From Penetration Tester to Security Engineer to Senior IT Security Consultant, our 5 ethical hackers cover all aspects of the Cybersecurity field.

Jordan Douliez
Ingénieur Sécurité @Thales

After 5 years at the École des Hautes Technologies et du Numérique, Jordan occupied positions as Scrum Master & developer then technical project manager (Avisto Telecom, Orange among others) before joining Thalès as a Security Engineer. He also works as a freelancer, giving him the opportunity to work in various sectors!

Nicolas Borrat
Senior Pentester

Nicola is a self-learner! Developer at the beginning, he then turned to the world of computer security. He joined the IONOS group as a Cyber Security Researcher. Some achievements? The detection of system flaws on several million websites! Nicolas is also the developer of an open-source tool dedicated to Cyber Security training: root-me!

Jérémie Amsellem
Senior IT Security Consultant @ Fenrir

Teaching is his job! After an academic career at EPITECH, Jérémie worked as a Developer and Software Developer for 4 years. Then he became a trainer for several scchools and produced pedagogical content on the themes of Pentest (Penetration Testing). At the same time, he works as a Security Consultant at Fenrir, a company specialised in the sector.

Guillaume Gracieux
Senior IT Security Consultant

Computer systems know him well, and vice versa! After 6 years of university studies, Guillaume became a systems engineer for i-BP (Banque Populaire), CGG Veritas and then Talendus where he stayed for 3 years as a Pentesting Engineer. He then worked for Econocom as an ISS (Information System Security) auditor and then for OKIDOK where he led several Cyber Security awareness workshops.

Xavier Coquand
Vulnerability Researcher @bsecure

Xavier is also a self-learner! He quickly developed a strong interest in IS security issues. He then became a Malware Analyst before joining Ecole 42 and then Atos as an auditor pentester. Today he works at Bsecure as a Senior Pentester: internal optimisation, vulnerability research are his favorite domains.

Events

The perfect opportunity to exchange with Tech professionals, but also to meet the Jedha team, teachers and alumni to chat together over a drink.

Let's meet to discuss a given topic with Tech professionals! Business use cases, skills to acquire, be inspired or even some more highly specialised technical topics.

The big gatherings of our community, the final AI projects of our Fullstack students! The moment to connect with the community and celebrate achievement.

Hosted by a member of the Jedha team, a professor or Alumni, we will answer all your questions: programs, admissions, financing, culture, anything you may want to know.

Sessions entirely dedicated to the Tech job market. Recruitment, hiring companies, application methodology, all the advice you need.

They hosted our events

UBISOFT — **Video games:** how to build a recommendation engine

UEFA — **Data Science** & Football: which applications?

KEYRUS insight into value — Career: Evolve in the world of **Data consulting**

deezer — Optimise your **Tech product** with Data

spendesk — **Treating text** with Data Science

Brut. — How to build your **Data department**?

Doctolib — What is the the job of **Data Engineer**?

PayFit — How to manage **growing volumes** of data?

PRELIGENS — Space defence: making analysis of **satellite images**

Join the community

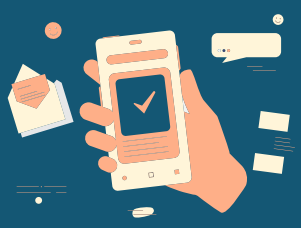
1. Apply or ask for Jedha syllabus on jedha.co

You are here

2. Book a phone or video meeting: click on the link in the email!

3. Talk to our admissions team by phone or in person to assess your needs and discuss any questions you may have.

4. Once your application has been confirmed and the pre-requisites have been met, start your bootcamp!



Get in touch with our team !

Want to study with Jedha?

Contact the admissions team **over the phone** or at admissions@jedha.co