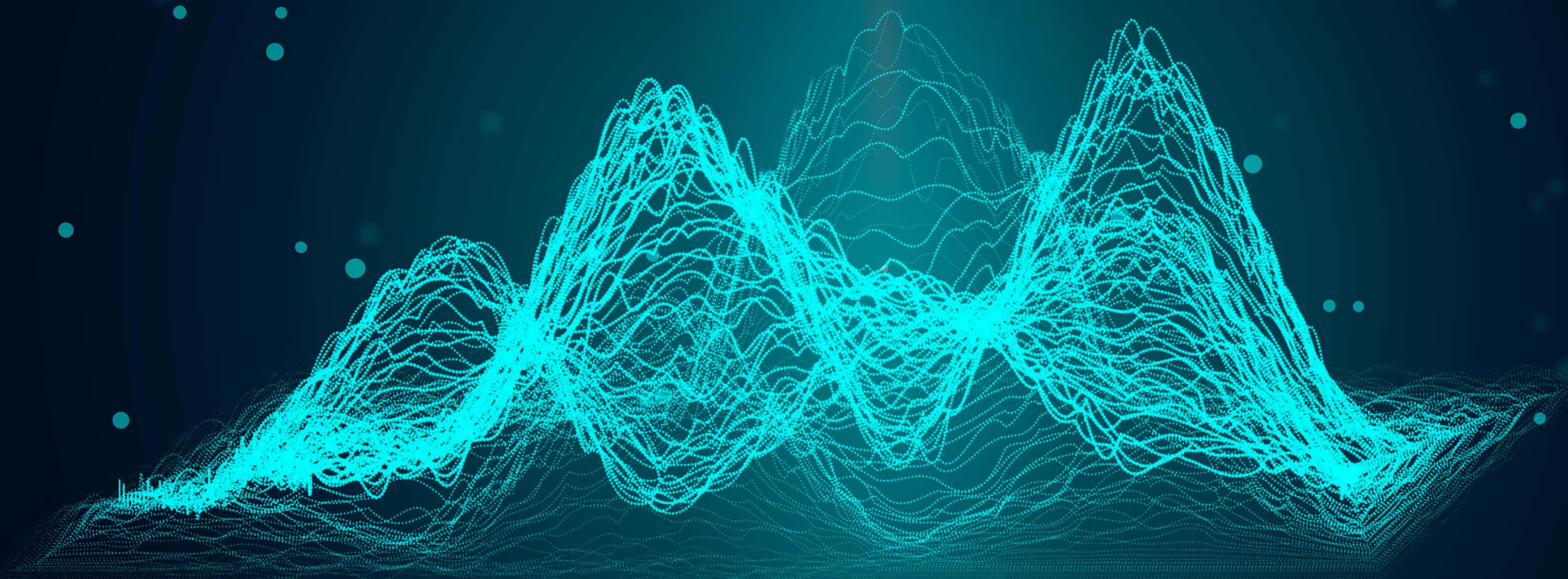


365 DataScience

The Ultimate Data Science

Career Guide



2023

Break Into Data Science

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Written by **Iliya Valchanov**

First edition edited by **Marta Teneva** and **Simona Dobрева**

Second edition edited by **Aleksandra Yosifova** and **David Hawthorne**

Second edition illustrated and designed by **Martina Videnova** and **Iv Dimanova**

365  DataScience

19 Vitosha Blvd, fl.3

Sofia, Bulgaria

<https://365datascience.com>

@365datascience





Iliya Valchanov

Co-Founder and Instructor at 365 Data Science

Iliya is the co-founder of 365 Data Science and the author of some of 365's best courses in Mathematics, Statistics, Machine Learning, and Deep Learning.

He's a Finance graduate with a solid quantitative background who chose the exciting path of a startup entrepreneur.

A Few Words by the Author

Over the past few years, we've received thousands of messages from our students asking for career advice. Some came from recent college graduates with no professional experience looking to get into the ever-expanding data science field; others came from tech industry professionals wondering how to hone their transferable skills and land a job in business intelligence or data science. There were also those who work part- or full-time in a completely unrelated field—ones who study on a tight schedule with admirable commitments to transfer into data science.

At 365, we are dedicated to helping all our students reach their career goals, regardless of their background, work experience, and field of expertise. And while our courses teach theoretical knowledge and practical skills, it's the career aspect of data science we've always felt compelled to address. So, we wrote this guide for you—the aspiring data science professional. We've spoken to experts, spent hundreds of hours reading the relevant literature, and, together with the 365 team, conducted research and analyses of the many job options available in data science. No matter where you are in your career development, on these pages you'll find the tools that will help you assess your skills, explore your options, and pursue the best career choice for you.

→ How do I get a job in data science?

→ What are the top data science career opportunities to explore?

→ Which are the best industries for data scientists?

→ Where do I find data science positions?

These are just some of the questions we answer. This guide provides you with the roadmap you need to design your professional development from square one and maximize your transferable skills in data science. It outlines the education and skills you need and, hopefully, navigates your path to a satisfying career. And although each person's experience is unique, these key points apply to everyone.

We hope you'll find this guide useful and refer to it for advice and direction. Don't hesitate to write to us; we are happy to be a part of your data science career journey.

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**Is
Data
Science
the
Right
Career
for Me?**

When we were at square one of our data science learning paths, we asked ourselves the same question, and we haven't forgotten that every expert was once a beginner. So, we created this data science career guide with a threefold purpose:

1**SHOW YOU**

why data science opportunities
are worth exploring.

2**INFORM YOU**

about the **different career paths**
and help you discover suitable roles.

3**PREPARE YOU**

to **pursue a career** in data science.

And if you're one step ahead and ready to start your learning journey, the **365 learning platform** is a great place to start.



You can preview the program
and start studying for free.

START LEARNING

What Makes Data Science a Good Career Choice?

Advancements in technology helped data science evolve from cleaning datasets and applying statistical methods to a field that encompasses data analysis, predictive analytics, data mining, business intelligence, machine learning, deep learning, and much more.

Now, some might still think that data science is just a trend and that the hype around it will eventually go away. But time has proven that nothing could be farther from reality.

WHY IS DATA SCIENCE IMPORTANT?

Data science is gaining speed as all businesses (and government organizations) use enormous volumes of data to improve their operations. There is virtually no industry that can't benefit from it.

Retail and e-commerce, logistics and transportation, healthcare, finance, insurance, and real estate—all these sectors need a strong data science team to leverage their organization's data to gain a competitive advantage. But what makes data science the magic ingredient for success? We answer this question with three tangible examples.

Formula 1

The Brazilian Grand Prix 2012

Red Bull's **Sebastian Vettel** suffers the worst possible start—his car spins out of control and loses its front wing on his opening lap. Vettel suddenly drops down to last place. All seems doomed for the champion. But the German somehow manages to recover and finishes sixth, which grants him just enough points to snatch the world title for the third year in a row in the most dramatic fashion.

Fierce driving or luck?

Nope. That's data science.

By the time Vettel made it to his 10th lap pit stop, a team of **brilliant data engineers** had already modeled data to run simulations. This allowed them to analyze what adjustments were necessary to keep Sebastian's Renault going for the remaining 70 laps.

What a huge victory fueled by data!

Amazon

Amazon has thrived by adopting an everything-under-one-roof model. But when faced with such a broad range of products, customers can often feel overwhelmed. To help customers find the right product, Amazon uses data gathered from customers to build and fine-tune its recommendation engines.

**THE MORE AMAZON KNOWS
ABOUT YOU, THE MORE IT CAN
PREDICT WHAT YOU WANT TO
BUY.**

And once the retailer knows what you might want, it can streamline the process of persuading you to buy it—e.g., by recommending specific products so that you don't have to search through the whole catalog.

Bernard Marr, 2021

Netflix

At the end of 2019, Disney launched their streaming service Disney+, which was built to compete with Netflix. The most significant competitive advantages Netflix had in the early days were their data and the fact that they were able to analyze more than 30 million “plays” per day and four million subscriber ratings. This enabled them to predict with accuracy what customers wanted to see next. Moreover,

NETFLIX FAMOUSLY USES DATA TO MAKE WINNING BETS ON TV SERIES,


such as House of Cards, The Crown, and Stranger Things. The powerful recommender engines and data analysis allowed the company to keep its market leadership position in the years to come.

THESE ARE THREE NOTABLE EXAMPLES OF THE CLEVER USAGE OF DATA SCIENCE IN BUSINESS. BUT ITS APPLICATION ISN'T RESTRICTED TO THE F1 RACETRACK, E-COMMERCE, OR THE PRODUCTION OF HIT TV SERIES.

WHO CAN BENEFIT FROM DATA SCIENCE?

You can. Your employer certainly can, too. In fact, the latter will welcome you with open arms once they realize you're brave and qualified enough to tame the tide of data and derive actionable insights to drive growth. After all, every company wants to ensure the well-being of their business.

Learn how to adopt a growth mindset in your organization, unlock the power of data-driven decision-making, and create real business value.



Data-Driven Business Growth

with Davis Balaba, Tina Huang

4.7/5 ★★★★★ (145)

4 hours • 38 Lessons

START LEARNING

So, being able to turn data into insights and actions into measurable results should secure lucrative job opportunities for you, right? Let's examine more closely the data science job outlook to answer that question.

What Is the Data Science Job Outlook

Data science is an ever-evolving field, as technologies change quickly. Therefore, you should be prepared that any data science job will require continuous learning and development of your competencies and skills. But before you invest time and effort, you must know what to expect.

Is data science a promising career?

What does a data scientist do on the job?

How do you acquire the necessary skills to land a job?

Will the salary meet your expectations?

To save you from browsing through job boards and career websites, we created this **“data science snapshot.”** We believe it will give you the insights you need to decide if this career path fits your aspirations.

WHAT IS THE FUTURE OF DATA SCIENCE JOBS?

According to the [Bureau of Labor Statistics](#), the number of data science jobs in the US exceeded 113,000 in 2021. By 2031, this number is estimated to grow by 36%—much faster than the average growth rate of 5%. In fact, there's a concern that the supply of data scientists and analysts won't meet the industry's demand.

Therefore, now is literally the best time to become a data scientist.

[Anaconda's 2022 State of Data Science](#) report shows that nearly 63% of respondents' organizations are concerned about the impact of talent shortages. In addition, over 56% believe that the shortage is among the main obstacles to adopting a data-driven business mindset.

This amalgam creates the perfect conditions for starting a career in data science. Data scientists are key figures for business growth in the modern business environment. As the demand for specialists is booming,

MORE EMPLOYERS THAN EVER ARE LOOKING TO HIRE DATA SCIENCE TALENTS ON THEIR TEAMS.

WHAT ARE THE MOST IN-DEMAND DATA SCIENCE SKILLS?

Data science is a relatively new field, yet it changes by the minute with the rapid development of technologies. Examining the job search landscape over the past few years will help you determine where to invest your efforts. Let's start with the findings from our [study on job offers in the field of data science](#).

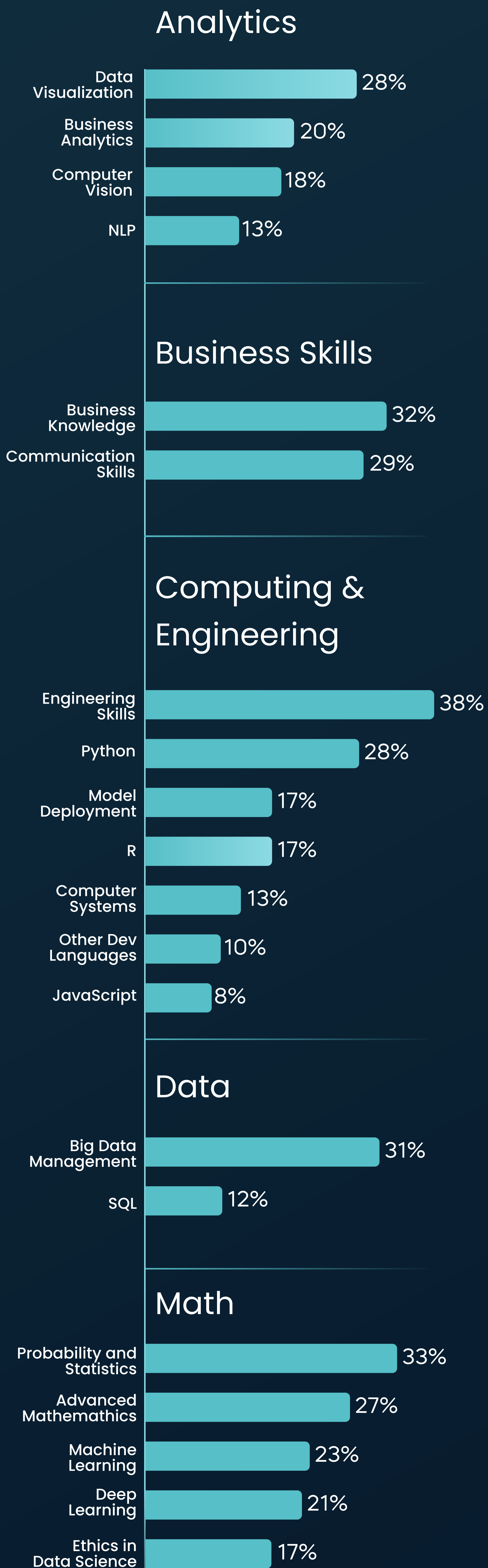
365's Job Offers Study

We performed a keyword analysis on **1,170 job descriptions** and extracted the most cited skills, programming languages, and machine learning techniques. Based on the frequency of mentions

MACHINE LEARNING, STATISTICS, AND PYTHON PROGRAMMING ARE THE MOST SOUGHT-AFTER SKILLS.

Undoubtedly, Python was the undisputed winner among the programming languages required for data science roles. But **R** and **SQL** also appeared frequently in job descriptions. Why is that? Data scientists need Python or R as a programming language and SQL to retrieve and explore data in a firm's database.

SKILLS GAPS IDENTIFIED BY EMPLOYEES WORKING IN DATA SCIENCE AND ML DEPARTMENTS (Anaconda Report, 2022)



Regarding machine learning, the most in-demand techniques were deep learning, clustering, and **Natural Language Processing (NLP)**. Last but not least, most job ads emphasize communication and business skills.

The Anaconda Report

These are the primary skills employers expect from data scientists. Will the demand remain unchanged?

We looked for an answer in the [2022 Anaconda report](#) and the skills gaps identified by over **1,440 people** working at data science and ML departments of different organizations.

According to them, the main areas of expertise needed but currently missing are:

- DATA ENGINEERING
- PROBABILITY AND STATISTICS
- BIG DATA MANAGEMENT
- BUSINESS KNOWLEDGE
- COMMUNICATION SKILLS
- PYTHON
- DATA VISUALIZATION

Regarding technical expertise, Python, R, and SQL will withstand the test of time.

All things considered, the law of supply and demand indicates the data science job outlook is more than **optimistic**—and so should you be you in pursuing your data science career goals.

What Are the Top Data Science Roles to Explore?

Navigating the multifaceted field of data science can be overwhelming at first. Companies recruit for various data science roles, and each requires different competencies. How do you know which one is most suitable for you? To help you sort things out, we've featured the top five in-demand types of data science jobs:

- **Data Scientist**
- **Data Analyst**
- **Business Intelligence (BI) Analyst**
- **Data Architect**
- **Data Engineer**

WHAT IS A DATA SCIENTIST?

Every data scientist worth their salt has solid statistics, business, computer science, analytics, and communication skills. They not only understand the language of data (through math and statistics) but can also analyze it and draw actionable insights from it. Moreover, they've mastered the art of data storytelling to a level that makes management and stakeholders nod in agreement and plan their strategy accordingly.

What Does a Data Scientist Do?

Their main goal can be summarized in a few words—**use data to create business value**. Data scientists have an intense curiosity and a passion for achieving business impact. Sometimes they don't even use complicated ML techniques but rely on simple statistical methods to make conclusions and add value to their company.

WHAT SETS APART THE BEST DATA SCIENTISTS IS THEIR WILLINGNESS TO LEARN AND EXPLORE NEW WAYS TO HELP THE BUSINESS GROW.

A DATA SCIENTIST CAN FIND THEMSELF IN DIFFERENT WORKING SITUATIONS.

Some will work for large companies and will have to apply sophisticated machine learning techniques to create business value (because others have already implemented simple optimizations). Others could be the first data scientists in a company and deal with time constraints and limited resources. Therefore, they **must remain flexible and adapt to current business needs**. Yet others will need to perform analyses and techniques they have not used in the past. The bottom line is that this job requires a willingness to learn and adapt to changing circumstances.

THE EASIEST WAY TO UNDERSTAND WHAT THIS JOB INVOLVES IS WITH AN EXAMPLE. READ OUR FULL ARTICLE FOR A PEAK AT THE DAILY TASKS OF A DATA SCIENTIST.



What Does a Data Scientist Actually Do?

How Much Does a Data Scientist Earn?

We answer this question with a detailed overview of the average data scientist's salary by years of experience, location, job title, education level, etc. in our article [Data Science Salaries Around the World](#). Here are some of the numbers, according to Glassdoor.

As a data scientist in the **USA**, you can earn a \$21,585 annual bonus on top of your \$102,848 average annual pay. That's a total of **\$124,433 per year**.

Have you set your gaze on London's Big Ben and the **UK**? Data scientists earn an average total compensation of **£55,093 per year**.

OVERALL, THE DATA SCIENTIST CAREER OUTLOOK IS UNDENIABLY POSITIVE. NO WONDER IT'S THE SEXIEST JOB OUT THERE!

How to Become a Data Scientist?

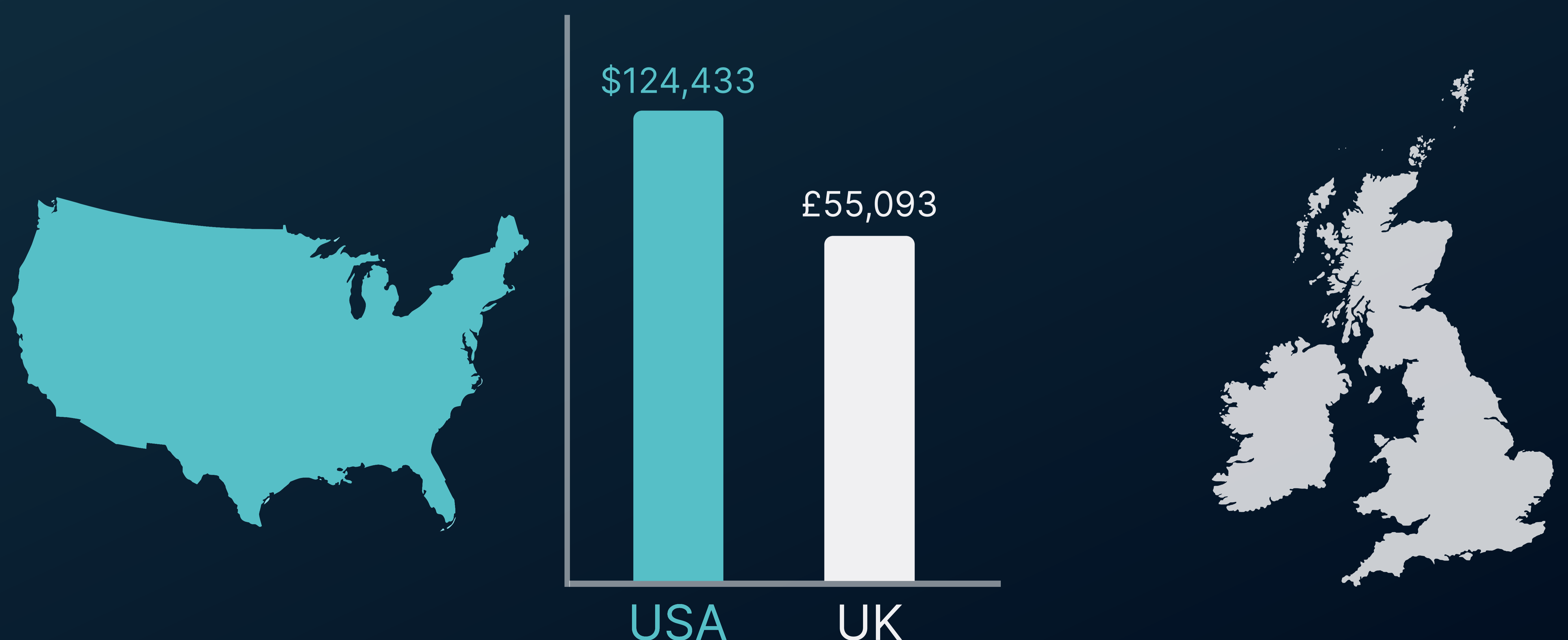
The demand for data scientists is constantly growing. This might be because "data scientist" is a broad term, and people hired for this job often fulfill **several different roles**. Or it might be because hiring managers are unfamiliar with the numerous and sometimes overlapping positions within the field—so they go for the broad term.

Either way,

THE DATA SCIENTIST CAREER IS CHALLENGING AND REWARDING. YOU'LL NEED TO BE CONSISTENT IN YOUR EFFORTS TO GET HIRED AS ONE.

Here's everything you need to know to get started with this career track.

Data Science Salaries



What Education Do You Need to Become a Data Scientist?

The first step to becoming a data scientist is education; a **university degree** will give you a head start. While most data scientists have a master's or a Ph.D., a bachelor's degree is good enough to get you on the data scientist path. An **impressive project portfolio** is sometimes enough to hire an individual without formal education as a data scientist.

According to [our extensive research](#) on how to become a data scientist, a background in one of the following disciplines increases your chances of landing your desired job.

- **DATA SCIENCE**
- **COMPUTER SCIENCE**
- **STATISTICS**
- **MATHEMATICS**
- **ECONOMICS**
- **SOCIAL SCIENCES**

If you already have a degree in one of those disciplines—great! You're one step ahead. But even if you don't have the opportunity to go through the traditional education path, don't worry. Data science is a field in which you **create your own experience**.

Students from entirely different areas of study can also become data scientists. To get hired, you need to show employers you can do the work. How? By working on projects, building a project portfolio, and obtaining a **certificate** to prove you have the required skills.

According to [data from successful data scientists' LinkedIn profiles](#), over 50% have completed at least one data science online course, with three certificates as the average. So, if you've never written a line of code, you can still make up for it with determination and commitment to learning. And ultimately, start a career in data science.



Data Scientist Career Track

📺 10 Career Track Courses

🕒 48 Hours of Video

🏆 Certificate of Achievement

Complete 365's Online Data Science Training Program

Find everything you need to become an expert data scientist—from the fundamentals of Mathematics, Probability, and Intro to Data & Data Science through Tableau, SQL, R, and Python, all the way to Machine and Deep Learning.

START LEARNING

What Data Scientist Qualifications Should You Acquire?

Data scientists are famous for their robust skill sets and competencies. But how can a single person simultaneously have outstanding technical expertise, business acumen, and interpersonal communication skills? Well, it takes a lot of hard work, of course. But you also need to know what skills to acquire. So, here are the must-have qualifications you need to become data scientist.

Technical Skills

- ✓ Excellent programming skills in Python or R and the related data science libraries (e.g., Pandas, NumPy, and scikit-learn for Python)
- ✓ Experience with relational databases and SQL
- ✓ Practical experience with Exploratory Data Analysis (EDA)
- ✓ Good understanding and experience with machine learning
- ✓ Excellent analytical and learning skills
- ✓ (Optional) Experience with deep learning frameworks (e.g., TensorFlow)

Practical Skills

- ✓ Desire to drive innovation and generate unique solutions
- ✓ Growth mindset
- ✓ Ability to track and share trends, best practices, and ideas
- ✓ Drive for performance
- ✓ Accountability
- ✓ Ability to thrive under pressure and fast pace
- ✓ Ability to take an unpopular stance

Soft Skills

- ✓ Strong communication skills
- ✓ Ability to develop and leverage relationships with stakeholders to achieve business goals
- ✓ Excellent teamwork and collaboration skills

Now that you have a good idea of what it's like to be a data scientist and how to become one, you should feel **more confident** to start your career. But if you need additional data scientist career tips and advice, scroll down. We've prepared a section with **resume tips, project portfolio advice, interview questions, and internship opportunities**. You'll also discover the most promising industries and organizations hiring data scientists and the best job boards for data science position.

WHAT IS A DATA ANALYST?

Data analysts are the troopers of data science. They're involved in gathering, cleaning, and analyzing data. And their main goal is to extract meaningful business insights. A data analyst does not work on machine and deep learning models, nor do they engage with predictive modeling. Instead, they focus on the analysis of past performance.

The job involves a significant amount of **Exploratory Data Analysis (EDA)** and data visualization with specialized tools, such as **Power BI** and **Tableau**.

What Does a Data Analyst Do?

A data analyst needs **solid SQL skills** to extract information from the firm's database. They use that data to answer ad-hoc inquiries by business stakeholders or build dashboards that satisfy the informational needs of business stakeholders continuously. Data analysts' focus is on extracting and communicating actionable data-related insights that create business value.

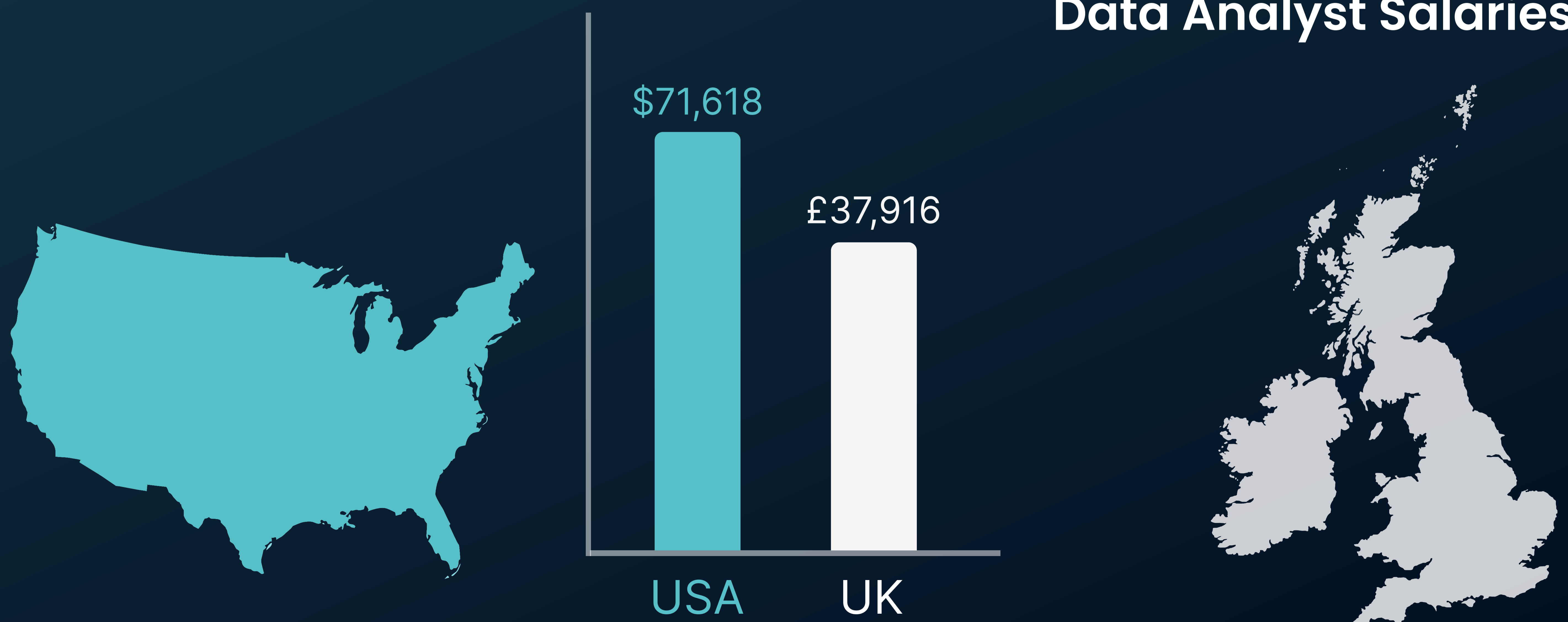
How Much Does a Data Analyst Earn?

Again, let's crunch the numbers from **Glassdoor**. If you're considering a data analyst career in the **US**, you can expect an average annual pay of **\$71,618**.

Are you based in the **UK**? The average compensation for data analysts (including bonuses and overtime pay) is **£37,916 per year**.

So, although it isn't quite as lucrative as that of a data scientist, the data analyst path is worth exploring.

Data Analyst Salaries



How to Become a Data Analyst?

Are you considering a career as a data analyst? That's a great option to explore on its own and as a gateway into data science. But before you take the first steps toward your data analyst career, you must ensure it is a suitable choice. To help you decide, we provide a **detailed overview** of the education and skills required to become a data analyst.

What Education Do You Need to Become a Data Analyst?

If you want to become a data analyst, a bachelor's degree in statistics, economics, IT, or computer science will give you a decisive advantage. But equivalent experience in **data and business analytics** also fits the bill.

The good news is that even if you lack the background and experience, you can still build your career from the ground up and get a job as a data analyst. There are various ways to learn the required skills, such as **taking qualification courses or enrolling in comprehensive online training**. Either way, you need to know everything from statistics and Excel to SQL, Python, and Tableau.



Data Analyst Career Track

▶ 10 Career Track Courses

🕒 41 Hours of Video

🏆 Certificate of Achievement

The 365 Data Analyst Career Track is the best place to kickstart your career. Learn everything required to become a sought-after professional—from probability and statistics to advanced analytical and visualization skills.

[START LEARNING](#)

The next step is landing an entry-level position as a data analyst. Even if you start with an unpaid internship, the key is to gain **valuable experience** and take advantage of as many in-house training opportunities as possible.

Practicing your Python skills on real-world data and communicating with experts in the field will **expand your knowledge** and put you on the data analyst track. And remember to stay curious and keep learning throughout your entire career.

What Data Analyst Qualifications Should You Acquire?

As a data analyst, you'll be juggling many tasks. Some essential job requirements include **technical expertise**, a **solution-oriented approach**, and the ability to **articulate complex technical terms** and concepts to a non-technical audience. But to be successful, you need to acquire several other skills as well.

Technical Skills

- ✓ Programming and coding language skills using Python or R
- ✓ Expertise in SQL
- ✓ Solid Tableau or Power BI skills
- ✓ Excellent Excel skills and the ability to use advanced analytics and formulas
- ✓ Extracting and analyzing data from diverse sources (multiple data marts and file formats)
- ✓ Statistical knowledge, including quantitative methods, confidence intervals, sampling, and test/control cells, and good command of statistical software packages

Practical Skills

- ✓ Strong attention to detail and ability to quality-check your own work and catch mistakes in data before delivery
- ✓ Analytical and data interpretation skills
- ✓ Ability to communicate the results of analyses in a clear and effective manner
- ✓ Confidence to challenge others' thinking and offer opinions, thoughts, and insights
- ✓ A proactive approach to problem-solving
- ✓ Quick learning skills

Soft Skills

- ✓ Excellent communication skills
- ✓ Ability to articulate complex concepts
- ✓ Adaptability and collaboration skills
- ✓ Good listening skills

Hopefully, these bullet points give you a better understanding of the **most important aspects** of a data analyst job. If you need further preparation, you can jump to the following sections of the data science career guide. Those will come in handy as a quick reference once you start sending out application forms and going to interviews.

WHAT IS A BUSINESS INTELLIGENCE ANALYST?

A BI analyst is someone who focuses on business performance analysis. Once the relevant data (monthly revenue, customer data, sales volume) is in the hands of the BI analyst, they must quantify the observations, calculate KPIs, and examine the measures to extract insights. Basically, BI analysts use data to create reports and dashboards and gain actionable business insights.

What Does a BI Analyst Do?

Data is business, and business is data. That's probably every BI analyst's motto. They possess a blend of business vision, consultant abilities, and solid statistics skills. Not to mention they are proficient in using data visualization software like Tableau and Power BI.

A BI ANALYST'S JOB OFTEN INVOLVES WORKING ALONGSIDE SENIOR MANAGEMENT TO SHAPE AND DEVELOP A DATA STRATEGY.

Analysis of Key Performance Indicators (KPIs), accurate overview of business performance, and identifying areas of improvement are all in the BI analyst's domain.

Data analysts and BI analysts' duties overlap to an extent. The main difference is that BI analysts focus on building meaningful reports and **dashboards** which satisfy stakeholders' informational needs and update them frequently.

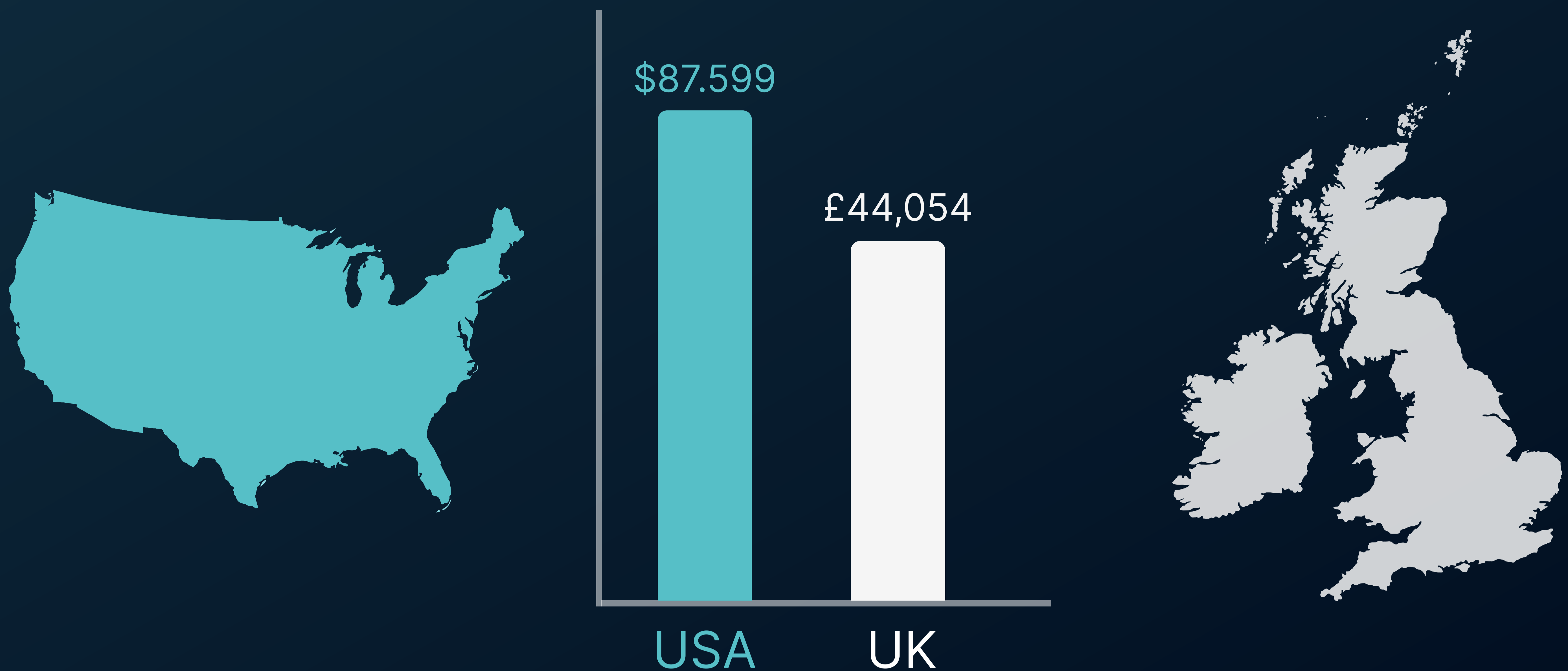
Do you want to have an impact on the business world?

Become a BI Analyst!

LEARN HOW TO BUILD THE PERFECT BI ANALYST RESUME.

BI Analyst Resume Sample and Template





How Much Does a BI Analyst Earn?

We found the answer in **Glassdoor**. If you're a BI analyst in the **USA**, you can expect an average annual pay of **\$87,599**.

Do you want to work in the **UK**? BI analysts earn an average total pay of **£44,054**. It sounds like advanced excel skills genuinely pay off!

How to Become a Business Intelligence Analyst?

A BI analyst's job has a lot to offer, but it requires **high-level skills**. Before you start building your career, you need to determine whether this is the right path for you.

To help you figure this out, we provide an insight into the BI analyst's duties and the education and skills required to become one.

A BI analyst's top priority is to consider the **business strategy** and use data to give the company a competitive edge. However, the job includes many other responsibilities and tasks, such as **calculating KPIs** and extracting insights from past historical data, and you'll need to gain the skills to complete them.

LET'S SEE WHAT EDUCATION AND QUALIFICATIONS WILL PAVE YOUR WAY TO SUCCESS.

What Education Do You Need to Become a BI Analyst?

Landing a job as a BI analyst should be relatively easy if you have a Bachelor's degree in one (or more) of the following:

- **COMPUTER SCIENCE**
- **ENGINEERING**
- **MATHEMATICS**
- **STATISTICS**
- **FINANCE**
- **BUSINESS ADMINISTRATION**
- **ECONOMICS OR A RELATED FIELD**

But don't get discouraged if your background is in contemporary dance or classical literature. Fortunately, **there are no limits to learning**. And it's never too late to acquire the crucial skills for a BI analyst.

There are plenty of **specializations** and comprehensive **online certificate courses** that will give you the knowledge and confidence required for the job. And here's a small tip: if you're new to data science, an internship in the financial industry can be a great start, helping you understand all business processes. Plus, you'll get an idea of the kinds of projects a BI analyst undertakes.

Not Sure Where to Start?



Business Analyst Career Track

📺 10 Career Track Courses

🕒 43 Hours of Video

🏆 Certificate of Achievement

Consider 365's Business Analyst Career Track to learn all data-related, business, and technical skills. It's the ideal gateway to your future career as a BI analyst.

START LEARNING

What BI Analyst Qualifications Should You Acquire?

A data science job is all about the **skillset**, and the BI analyst path makes no exception. Excellent **communication** and **presentation** skills are just as crucial as technical competencies. Here's the complete list of skills you need to become a BI analyst.

Technical Skills

- ✓ Solid SQL skills
- ✓ Experience with Power BI/ Tableau
- ✓ Advanced Excel skills
- ✓ Programming skills (Python or R are highly desirable)
- ✓ Data interpretation and recommendations based on findings
- ✓ Good data visualization abilities

Practical Skills

- ✓ Learning concepts quickly and applying them to design creative solutions
- ✓ Analytical skills
- ✓ Presentation skills
- ✓ Ability to design rich data visualizations and dashboards to communicate complex ideas to business partners and leadership
- ✓ Flexibility and adaptability

Soft Skills

- ✓ Excellent verbal and written communication skills
- ✓ Ability to work well as part of a team in a high-pressure, agile environment
- ✓ Ability to understand and analyze data on individual and team performance
- ✓ Fast in understanding the business needs and stakeholders' requirements

Now you know what to expect from a BI analyst job and what you need to get it.

But career insights are always welcome. You can scroll down to the job application advice sections in this guide to expand your know-how. They will be a helpful companion on your way to a successful career.

WHAT IS A DATA ARCHITECT?

If you've seen the 1999 cult movie **The Matrix**, you probably recognize the Architect as the creator of the utopian world for human minds to inhabit. Much like their blockbuster counterpart, data architects **create the database from scratch**. They design the way data will be retrieved, processed, and consumed. Without proper data architecture, key business questions may remain answered due to the lack of coherence between different tables in the database.

What Does a Data Architect Do?

Do you have an analytical and creative mind? Are you a problem-solver driven by curiosity and excitement to build complex database systems? Then the data architect career path is perfect for you.

Data architects are senior professionals with significant technical expertise who adapt dataflow management and data storage strategies to a wide range of businesses and solutions. They design practical database models and foresee the needs of business stakeholders to ensure an optimal database schema. Furthermore, they determine who can access certain data types. (All you corporate spies out there—now you know who to look for.)

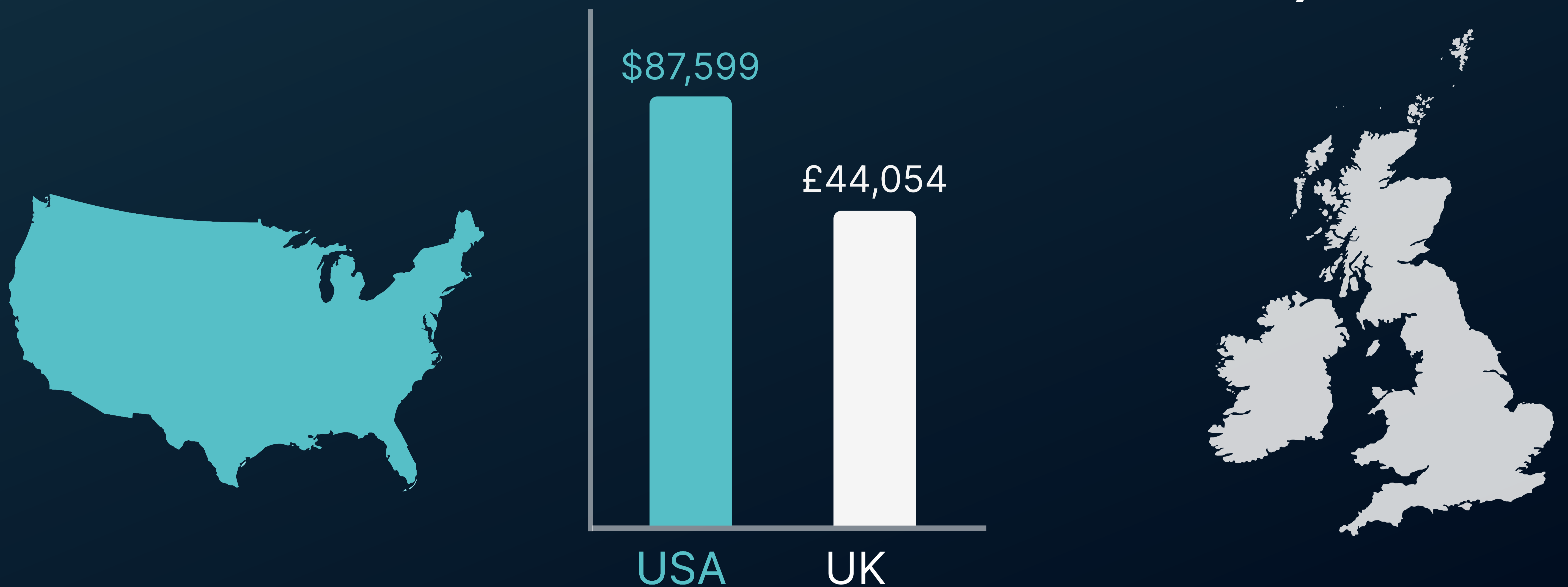
DATA ARCHITECTS ARE ALSO RESPONSIBLE FOR DESIGN PATTERNS, DATA MODELING, SERVICE-ORIENTED INTEGRATION, AND BUSINESS INTELLIGENCE DOMAINS.

They often partner with fellow data scientists and IT specialists to reach the company's data strategy goals. Other tasks include seeking innovations to improve data quality and reporting, eliminating redundancies, and providing better data collection sources, methods, and tools.

LEARN HOW TO BUILD THE PERFECT DATA ARCHITECT RESUME.

Data Architect Resume Sample and Template





How Much Does a Data Architect Earn?

According to Glassdoor, the average annual pay for data architects in the **US** is **\$160,534**.

What about the **UK**? As a data architect, you can earn an average compensation of **£78,453** per year.

How to Become a Data Architect?

The data architect role is increasingly vital for enterprises and business success. If your data career goal is to become a data architect, we have two things to say:

1. **GREAT CHOICE**
2. **PREPARE FOR HARD WORK AND CONTINUOUS LEARNING.**

We provide a concise overview of the qualifications and skills you need to obtain to begin your data architect journey.

What Education Do You Need to Become a Data Architect?

If you want to become a data architect, a bachelor's degree in information systems, computer science, engineering, or a related field will give you a competitive edge. But don't despair if you've studied something entirely different, as these are not the only prerequisites to getting the job.

LinkedIn job offers indicate that employers value relevant work experience over shiny degrees. While a bachelor's degree in computer science is desirable, they may be willing to waive this requirement entirely if you have significant and applicable real-world experience.

So, how can you get there? This is not a junior role, so you need vast experience as a **database administrator, data engineer, or data scientist**. In addition, you need robust SQL and database design skills. You can take additional qualification courses or enroll in an online certificate data science training to build up your knowledge.

What Data Architect Qualifications Should You Acquire?

Here are the primary qualifications and skills you need to become a data architect.

Technical Skills

- ✓ Strong data modeling skills
- ✓ Database architecture experience
- ✓ Data warehousing experience
- ✓ Data governance know-how
- ✓ Experience with Python or R
- ✓ Experience with SQL
- ✓ Good command of data visualization tools (e.g., Tableau)
- ✓ Knowledge of data retention concepts and practices
- ✓ Automation of data flows and integrations
- ✓ A good understanding of XML and Java

Practical Skills

- ✓ Ability to determine key architecture solutions that meet performance, scalability, reliability, and security needs
- ✓ Research and evaluation of emerging data management technologies for applicability and adoption
- ✓ Ability to present technical concepts to upper-level management and officers
- ✓ Ability to work independently
- ✓ Strong problem-solving skills
- ✓ Attention to detail
- ✓ Establishment and implementation of standards and guidelines

Soft Skills

- ✓ Excellent communication skills
- ✓ Provision of technical leadership and guidance to the project team as appropriate
- ✓ Strong multitasking capabilities

Now you know what you need to become a data architect. If you want to take your job preparation to the next level, scroll down. The detailed information about **employment opportunities** will help you with the first steps to a successful career.

WHAT IS A DATA ENGINEER?

Data engineers are the ones to take things further up the data science pipeline. Companies rely on data engineers to execute the plans created by data architects. Sometimes the role of data engineers and data architects often overlaps—especially in smaller businesses.

processing it in a usable format, and moving it to a repository (the firm's database). Simply put, they pipe data into tables correctly. Typically, they receive many ad-hoc ETL-related tasks. Data engineers need strong software engineering skills and rarely interact with business stakeholders directly.

What Does a Data Engineer Do?

A data engineer builds the necessary data infrastructure by **organizing tables** and **setting up the data** to match all use cases defined by the data architect.

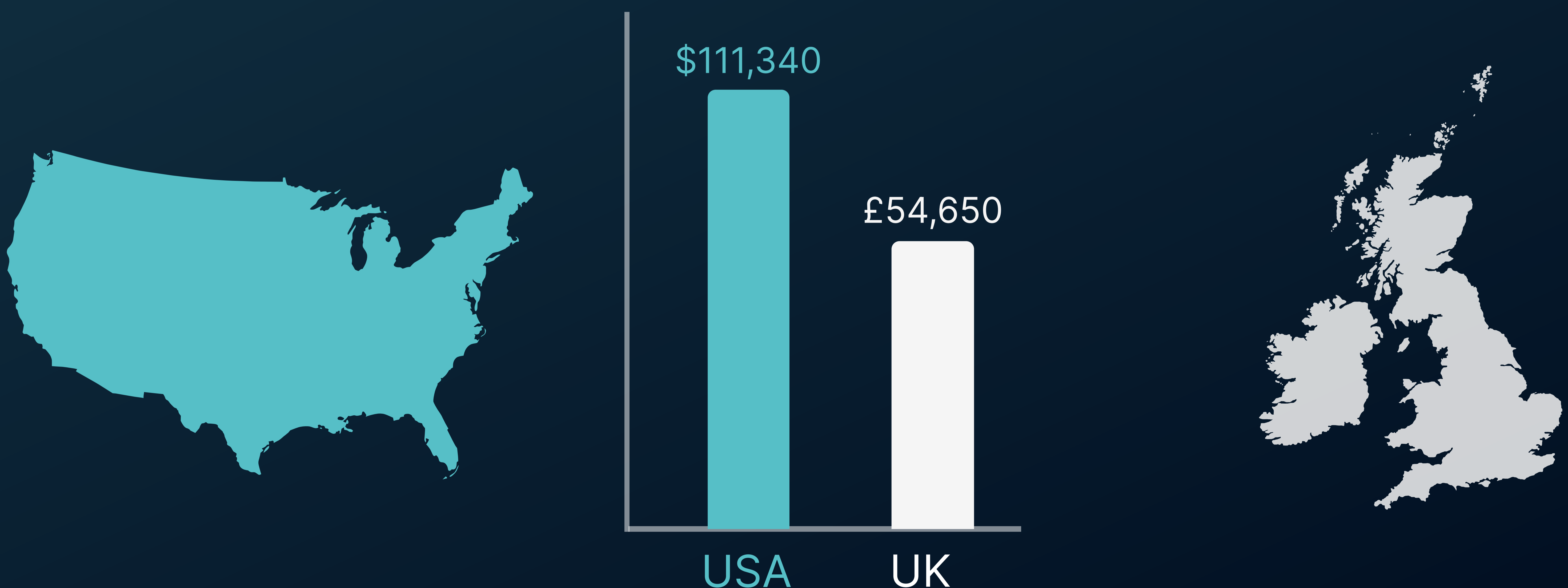
They handle the so-called ETL (Extract, Transform, and Load data) process, which consists of retrieving data,

How Much Does a Data Engineer Earn?

We consulted Glassdoor to give you the answer. In the **US**, the average pay for a data engineer is **\$111,340 per year**.

Looking for a data engineer job in the **UK**? You can get an average pay of **£54,650** per year (including bonuses and overtime pay). Big data, big rewards!

Data Engineer Salaries



How to Become a Data Engineer?

If you're excited about big data career opportunities, this career path could be the one for you. But how to become a data engineer? A developer's or software engineering experience can be the gateway to a data engineer's job. And what if you're new to the field and not sure you've got what it takes to get there? Don't worry. Here are the education and qualifications that will open the door to a data engineer career.

What Education Do You Need to Become a Data Engineer?

A degree in software engineering, computer science, or information technology will give you a flying start. If don't have one, you can still make the cut as long as you acquire the knowledge. Either way, you'll need strong computer science and relational database management skills.

Now, before you rush into writing off this great job opportunity, you should know that acquiring these skills is achievable even for beginners. You simply have to enroll in a qualification program or comprehensive online data science training. Once you gain experience through real-world exercises and projects, you'll have the skills, confidence, and portfolio to apply for a data engineer position.

LEARN HOW TO BUILD THE PERFECT DATA ENGINEER RESUME

Data Engineer Resume Sample and Template



WRITE A KILLER COVER LETTER

Data Engineer Cover Letter Sample and Template



PREPARE FOR THE INTERVIEW

Data Engineer Interview Questions and Answers



What Data Engineer Qualifications Should You Acquire?

A data engineer job comes with many responsibilities. Here's a list of the main competencies and skills you need to become a data engineer.

Technical Skills

- ✓ Knowledge of data modeling for data warehousing and big data
- ✓ Ability to write, analyze, and debug SQL queries
- ✓ Experience in the big data space (Hadoop Stack like M/R, HDFS, Pig, Hive, etc.)
- ✓ Experience with at least one scripting language (e.g., Python)

Practical Skills

- ✓ Data visualization skills (make Tableau your best friend)
- ✓ Analytical skills
- ✓ Ability to make sound decisions even in the absence of complete information
- ✓ Ability to follow through on commitments and make sure others do the same
- ✓ Taking responsibility for one's decisions, actions, and failures
- ✓ Establishment of clear processes for monitoring work and measuring results
- ✓ Designing feedback loops into work
- ✓ Strong attention to detail

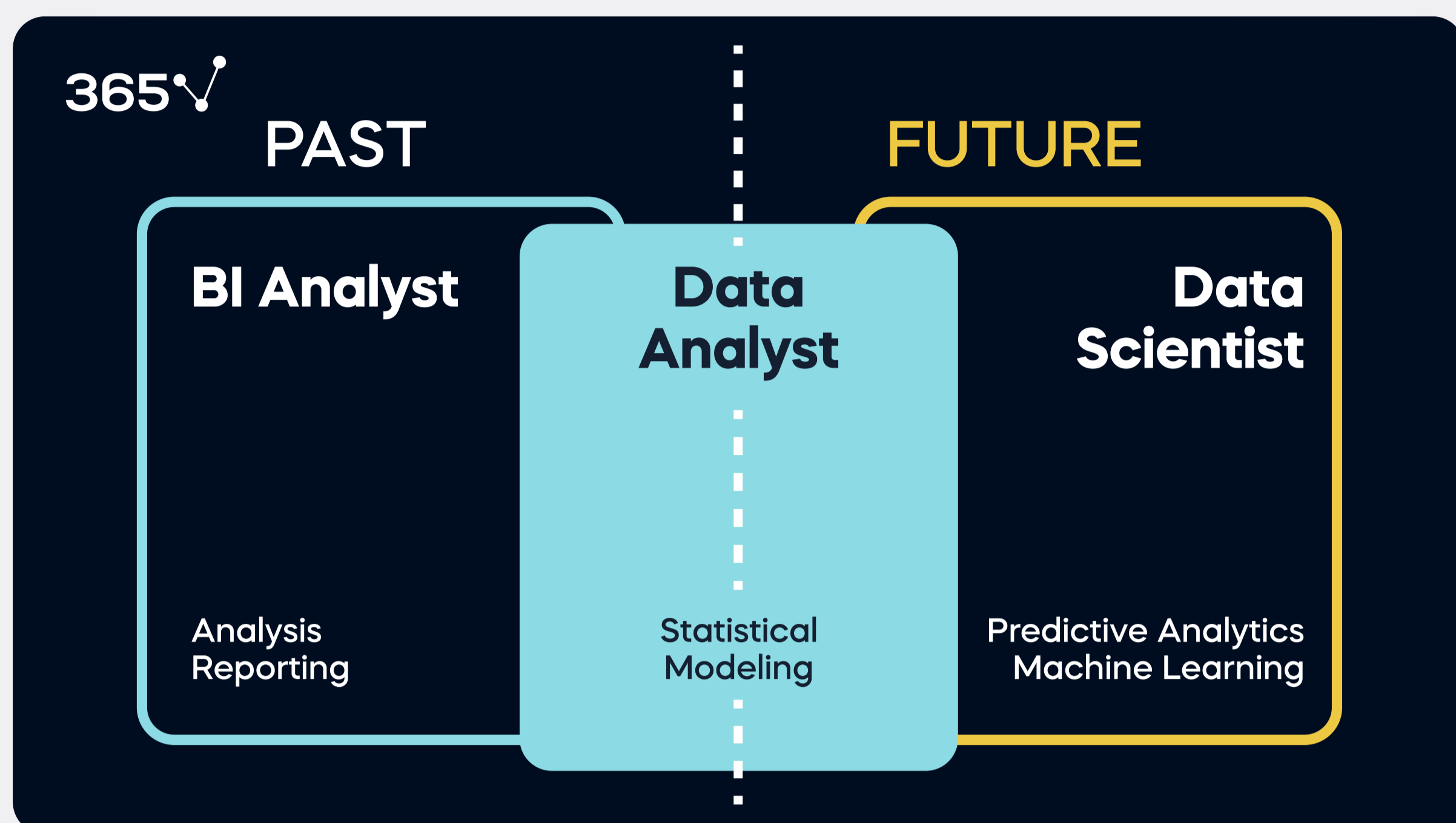
Soft Skills

- ✓ Strong communication skills in various settings
- ✓ Ability to think critically and conceptually

Now you know what it's like to be a data engineer and how to become one. Of course, better preparation means higher chances of success. So, if you want to gain more helpful insight and career advice, you can find our resume and portfolio tips in the following sections of the guide.

Overlapping Roles

In your job search, you may encounter several offers with **similar responsibilities** listed in the description because some roles—such as **data analyst** and **business intelligence analyst**—have overlapping areas. Similarly, the difference between a traditional data scientist, a research scientist, and an applied scientist is subtle.



Data Scientist

VS

Data Analyst

VS

BI Analyst

Data scientists, data analysts, and BI analysts' duties overlap to an extent.

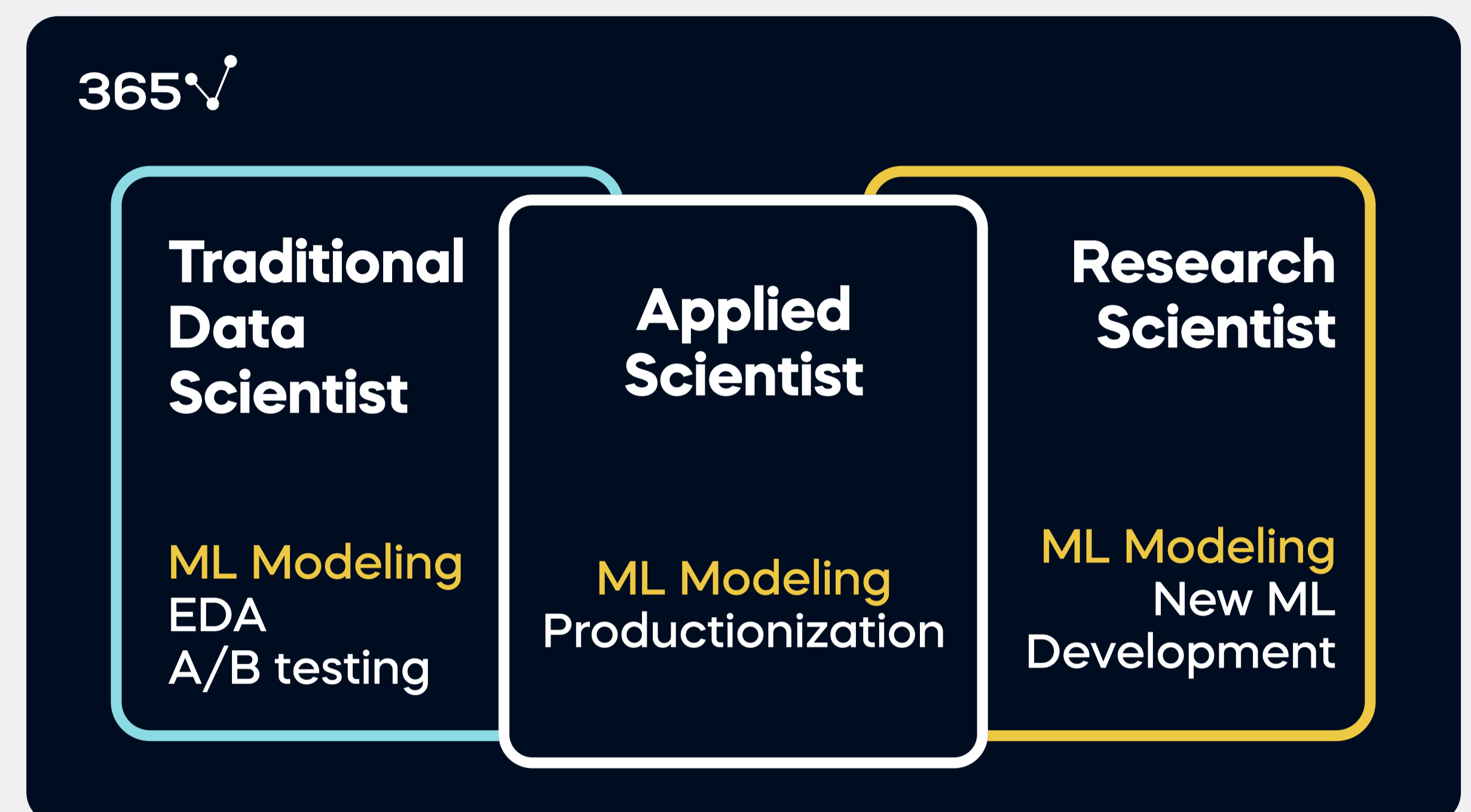
The main difference is that

BI ANALYSTS have more of a reporting role, focusing on building dashboards.

In contrast, **DATA ANALYSTS'** primary responsibilities span from exploring and cleaning to analyzing and visualizing data.

DATA SCIENTISTS have the skills of a data analyst but can leverage machine and deep learning to create models and make predictions based on past data.

Ultimately, both roles aim to provide valuable insights for the business.



Traditional Data Scientist

VS

Research Scientist

VS

Applied Scientist

TRADITIONAL DATA SCIENTISTS

are generalists who engage in various data science tasks, including data exploration, advanced statistical modeling, experimentation via A/B testing, and building and tuning machine learning models.

RESEARCH SCIENTISTS, on the other hand, are specialized data scientists hired primarily by large companies to develop new machine learning models.

APPLIED SCIENTISTS often work for big tech and larger companies. They can combine data science and software engineering skills to productionize their model. As such, this is one of the highest-paid roles in data science.

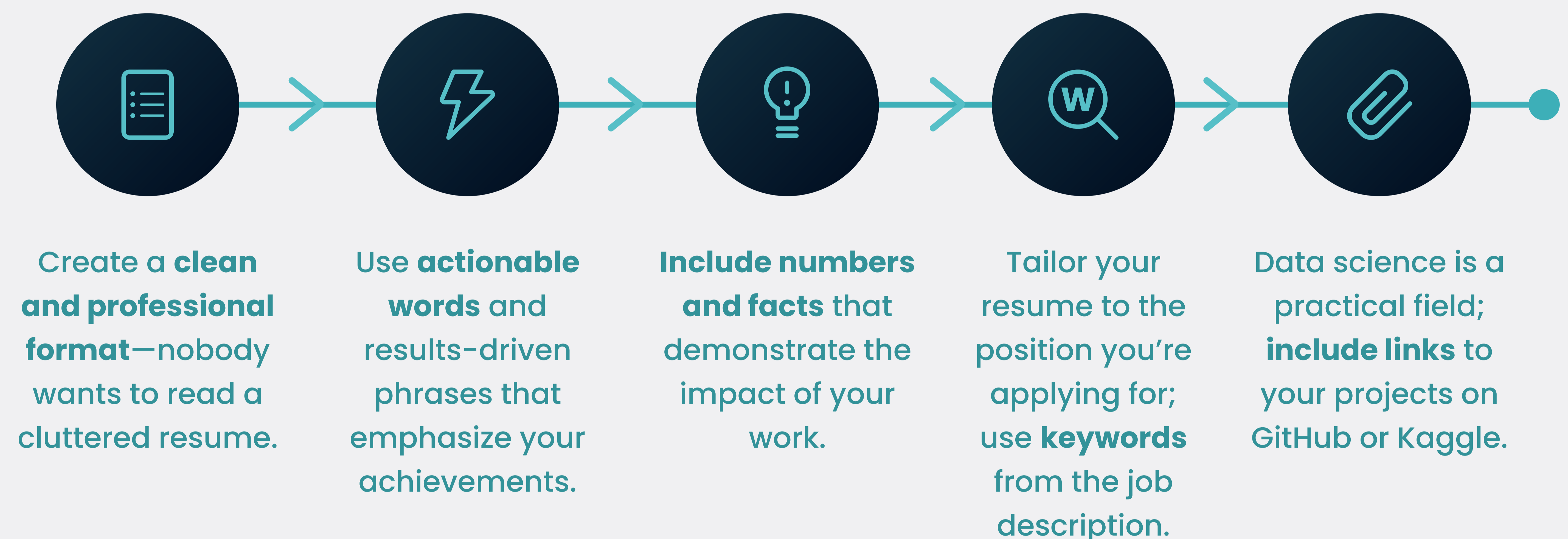
How to Get a Job in Data Science

Regardless of the exact position you want to pursue, there are some universal guidelines for landing a job in the data science field. Follow them, and soon you'll get your first job. Without further ado, let's go through the steps that will guide you during the application process.

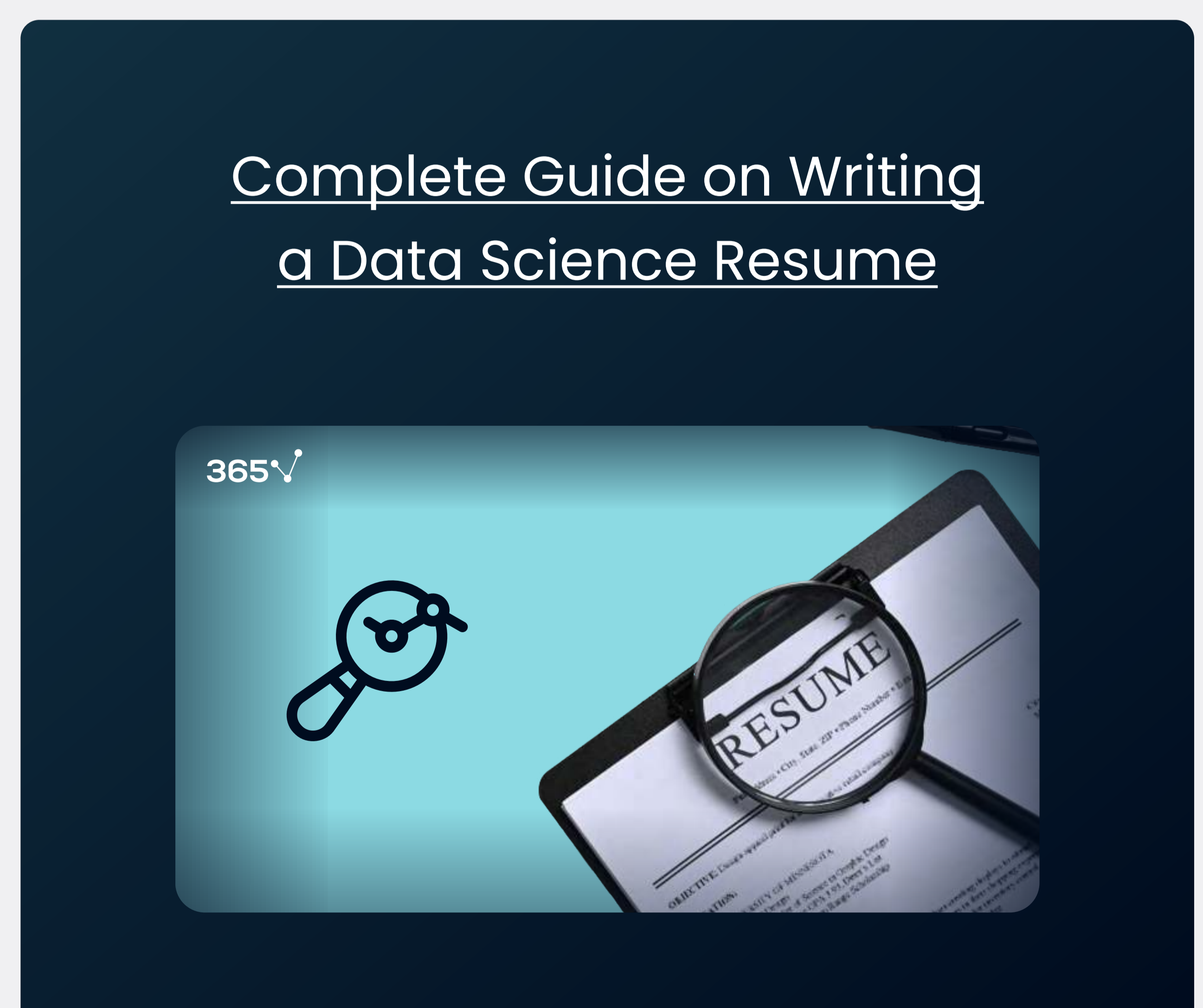
HOW TO WRITE A COMPELLING DATA SCIENCE RESUME?

They say you only have **three seconds** to make a great first impression. And you can be sure that applies to your job resume, especially in the super-competitive field of data science. A well-thought-out and carefully designed resume isn't just a pass to a job interview. It can pre-determine what questions you'll be asked during the interview and whether you'll get the welcome-to-the-company handshake.

So, if you want to create an outstanding resume that will present you in the best light, invest the time and effort to make it great. Start by implementing the following best practices—they'll do wonders for your resume:



The format and content of your resume will vary depending on your background, prior experience, and the position you're applying for. Our **Complete Guide on Writing a Data Science Resume** covers the most suitable types of resumes for recent data science graduates, people transitioning from another field, and seasoned professionals looking to change or advance their careers. Check out our guide for more advice.



HOW TO BUILD A DATA SCIENCE PROJECT PORTFOLIO THAT STANDS OUT?

While a resume matters, your data science career prospects heavily depend on your project portfolio. Why? Because it's real-life proof of what you can do. And that's what potential employers look for when scouting for data science talent. So, how can you build a good project portfolio that makes up for your lack of previous experience in the field? Here's what you can do.

University Projects

These are excellent places to start. It's good practice, to begin with, mainly because there's always someone you can approach with a question. You'll do them as part of your studies, anyway, so why not include them in your portfolio—at least until you accumulate more examples of your work?

School projects, however, are the fruit of teamwork, and solutions are provided in the end. Typically, you don't get to choose the project, and you can't truly showcase your talent. As such, it's far better to include personal projects in your portfolio.

Course Projects

If you're enrolled in an online data science certificate course

YOU'LL HAVE THE OPPORTUNITY TO BUILD A PORTFOLIO BY COMPLETING THE LARGER HANDS-ON PROJECTS AT THE END OF THE COURSE SECTIONS.

While that's good practice, you won't stand out with creativity—there will likely be tens if not hundreds of other candidates with the same projects in their portfolios.

Still, you can use them to **demonstrate your skills and capability to work independently**. At the same time, you'll have the security of knowing there's someone you could ask for help while you're still learning.

Personal Projects

This is where you show your true data science capabilities and aspirations. Personal projects set you apart from the rest and demonstrate initiative and ability. They also present an excellent opportunity to show your true passions and interests.

THEY ALSO PRESENT AN EXCELLENT OPPORTUNITY TO SHOW YOUR TRUE PASSIONS AND INTERESTS.

Just find a problem you'd like to solve, collect the necessary data, and apply your data science skills to find the solution.

Of course, that's easier said than done. We know the process can be intimidating, especially if you're at the very beginning of your career path.

To help you find the inspiration and courage to start,

WE'VE PREPARED A LIST OF DATA SCIENCE PROJECT IDEAS AND SOME GUIDELINES AND RESOURCES TO HELP YOU SOLVE THEM.

Top 10

Data Science Project Ideas



And if you feel you're not ready to build a data science project from start to finish alone, you can **join a data science competition**. There are plenty of challenges for aspiring data scientists, like the ones on Kaggle, 365 Data Science, and many other platforms. They usually provide ready-made datasets and instructions, meaning you'll have plenty of guidance, and you won't have to start from scratch. You'll build your skills and portfolio while competing for a prize.

Volunteer Work

Once you gain confidence in your skills, you can start searching for clients. Landing your first few clients will be challenging but rewarding. To succeed, you must be persistent and proactive, develop a thick skin, and be willing to work for free.

Although pro-bono work isn't for everyone, some free-of-charge projects for a company or an NGO can do wonders for your data science portfolio.

SUCH EXPERIENCE WILL ADD EXTRA POINTS TO YOUR RESUME AND BOOST YOUR DATA SCIENCE SKILLS.

It'll also give you insight into the real-world working environment, teach you valuable lessons about building relationships with clients, and lay the foundations of your professional network.

HOW TO PREPARE FOR A DATA SCIENCE INTERVIEW

Data science interviews comprise **tons of topics**. These vary from coding and machine learning questions, statistics and mathematics tasks, and case study scenarios to the inevitable background check and behavioral questions. How do you handle all this? As always—**preparation is the key**.

For starters, prepare for the **technical part** of the interview. You must be ready to answer questions about data modeling, algorithm, statistics, and any tools and skills you might need to perform the job. You can review the job description and company website and thoroughly research all relevant topics.

After you've gained confidence that you're suitable for the job, start preparing for the **behavioral interview** questions. You know—the “tell me about a time when” or “what would you do if” type of questions. These aim to assess whether your way of thinking fits the requirements of the role you're applying for—in other words, whether you're a good fit for the job.

The **personal interview** questions are equally important. Be prepared to discuss your background, job expectations, and career aspirations.

**AND ASK QUESTIONS IN RETURN
—THAT'S HOW YOU ESTABLISH
WHETHER A COMPANY IS A
GOOD FIT FOR YOU.**

All this may seem overwhelming at first, but don't worry. Like everything else, it just takes practice. And we won't leave you alone. We've prepared a detailed guide with [Data Science Interview Questions](#) covering all these points.

**WE ALSO OFFER A FULL COURSE ON
STARTING A CAREER IN DATA SCIENCE.**

Learn from industry expert Ken Jee

how to build a project
portfolio, create a resume,
and prepare for an interview.



Starting a Career in Data
Science: Project Portfolio,
Resume, and Interview
Process

with Ken Jee

4.9/5 ★★★★★ (313)

4 hours • 52 Lessons

START LEARNING

HOW TO LAND YOUR FIRST DATA SCIENCE JOB

Landing your first job can be challenging and time-consuming, but you shouldn't get discouraged. We provide a detailed guide on [how to become a data scientist with no experience to help you out](#). These are the main steps you should follow to succeed.

The key to landing any job is being proactive and demonstrating enthusiasm. So, before you start applying for jobs, focus your efforts on **building a professional network**. You can do that while learning by joining data science forums, attending conferences and networking events, connecting with people with similar interests on LinkedIn, and so on.

This will boost your job search in several ways. For starters, you'll familiarize yourself with the data science world, the trending topics and tools, and how data scientists speak and think. Getting into the mind of accomplished professionals is the first step to becoming one.

Moreover, by being active on social media, forums, and discussions, you'll build your online presence and establish yourself as an expert. Lastly, the connections and relationships you create can become your **gateway** into the data science world.

The easiest way to get noticed by employers is through a recommendation, and you can't get one unless you network.

The next step is to approach employers. An **impressive project portfolio** and a broad **professional network** are prerequisites for making a good impression. But before you have any real work experience, you'll need to make an extra effort to be noticed. So, find the companies you like on social media, look out for **job postings**, and reach out to hiring managers. Even if they're not hiring at the moment, you could offer to do some **volunteer work** for them. That way, once they do have an opening, they'll be much more likely to consider you as an applicant.

Internships are also excellent stepping stones to a successful career. As an intern, you'll not only hone your practical data science skills but also work on a variety of projects. Plus, an internship at a high-profile company will skyrocket your data science career. But how to go about it when you have no previous experience?

**FOLLOW OUR GUIDELINES ABOVE
AND READ OUR BLOG ARTICLE
FOR MORE**



Which Industries Should You Consider for Your Data Science Career?

So far, we've covered the "how" of the job search. Now, it's time to focus on the "where."

Where do data scientists work?

As it turns out, everywhere! The data boom created a demand for data science specialists across an evergrowing variety of industries. From finance and insurance to agriculture, forestry, and construction—every organization can benefit from a data science expert.

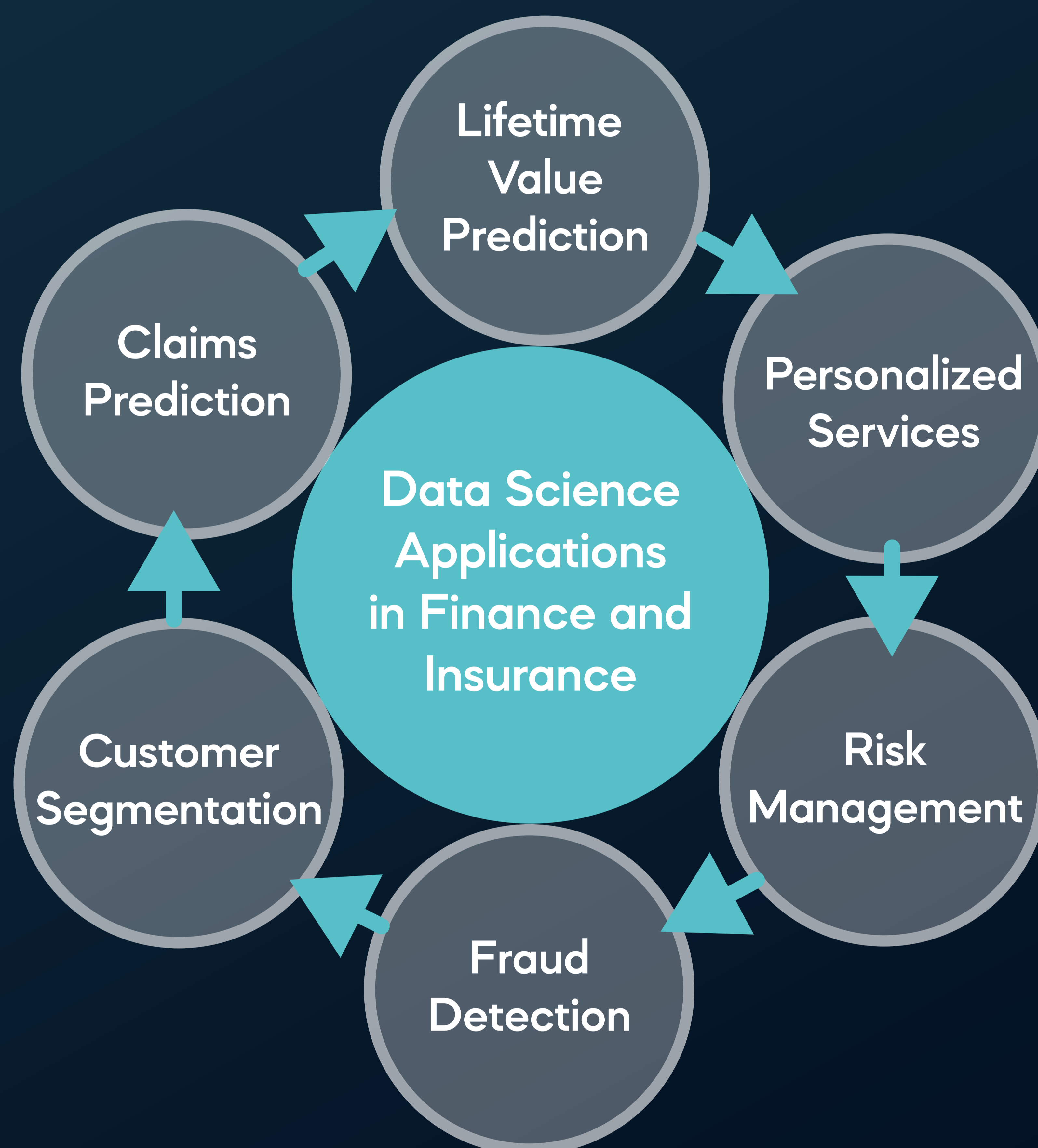
So, what type of data scientist would you like to be?

On the following pages, we present the top four industries to consider. If you need a wider choice, we also offer a comprehensive overview of the [best industries for data scientists](#) in our blog article.

FINANCE AND INSURANCE

Finance and insurance is the industry with the **highest demand** for data science and analytics talent. A data specialist in this sector could be occupied with various tasks—from industry-specific solutions like risk management and fraud detection to customer segmentation and personalization.

DATA SCIENTISTS AND ANALYTICS PROFESSIONALS NEED A DIVERSE SKILL SET TO COMPLETE ALL THESE.



But what distinguishes a financial data scientist from experts in other sectors?

THEIR EXPERIENCE AND FINANCIAL KNOWLEDGE.

SO, IF YOU WANT TO EARN THE TITLE OF FINANCIAL DATA SCIENTIST, YOU NEED (AMONG OTHER CONCEPTS) PROFOUND KNOWLEDGE ABOUT:



Keep in mind that this is not a job you land without a few years of experience in the field. But if you start as a financial analyst, study hard, and keep your eyes on the prize, you can quickly work your way up to the coveted financial data scientist position.

Learn the skills to become a data scientist in finance with 365 Data Science.

In addition to the fundamental data science and analytics courses, we offer advanced specialization for different industries, like the Python for Finance course.



Python for Finance

with Martin Ganchev, Ned Krastev

4.8/5 ★★★★★ (106)

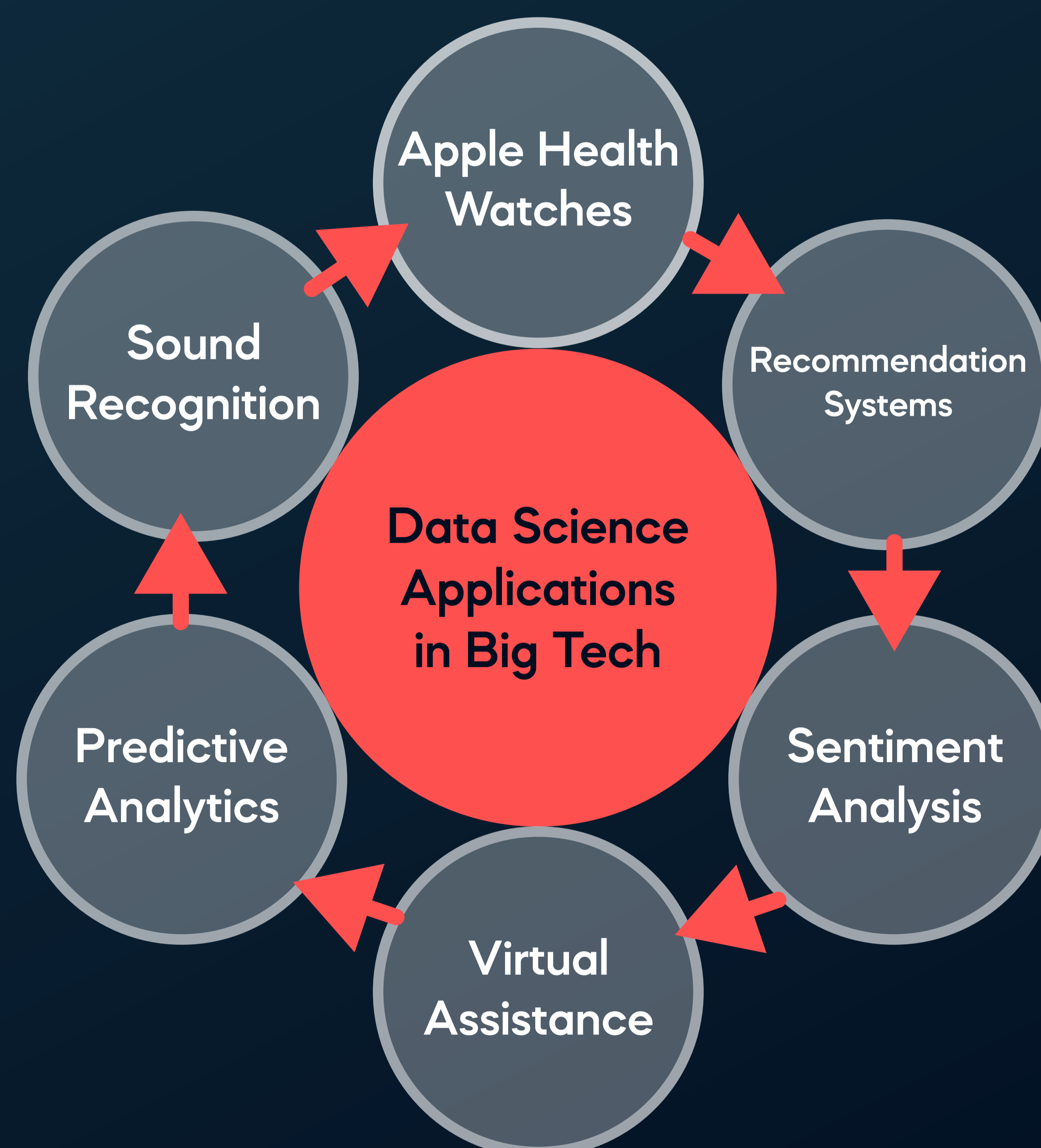
4 hours • 65 Lessons

START LEARNING

DATA SCIENCE IN BIG TECH COMPANIES

The Big Five (also known as FAANG companies) are arguably the top workplaces for data scientists—not just because of the enormous salaries but because they're at the forefront of innovation.

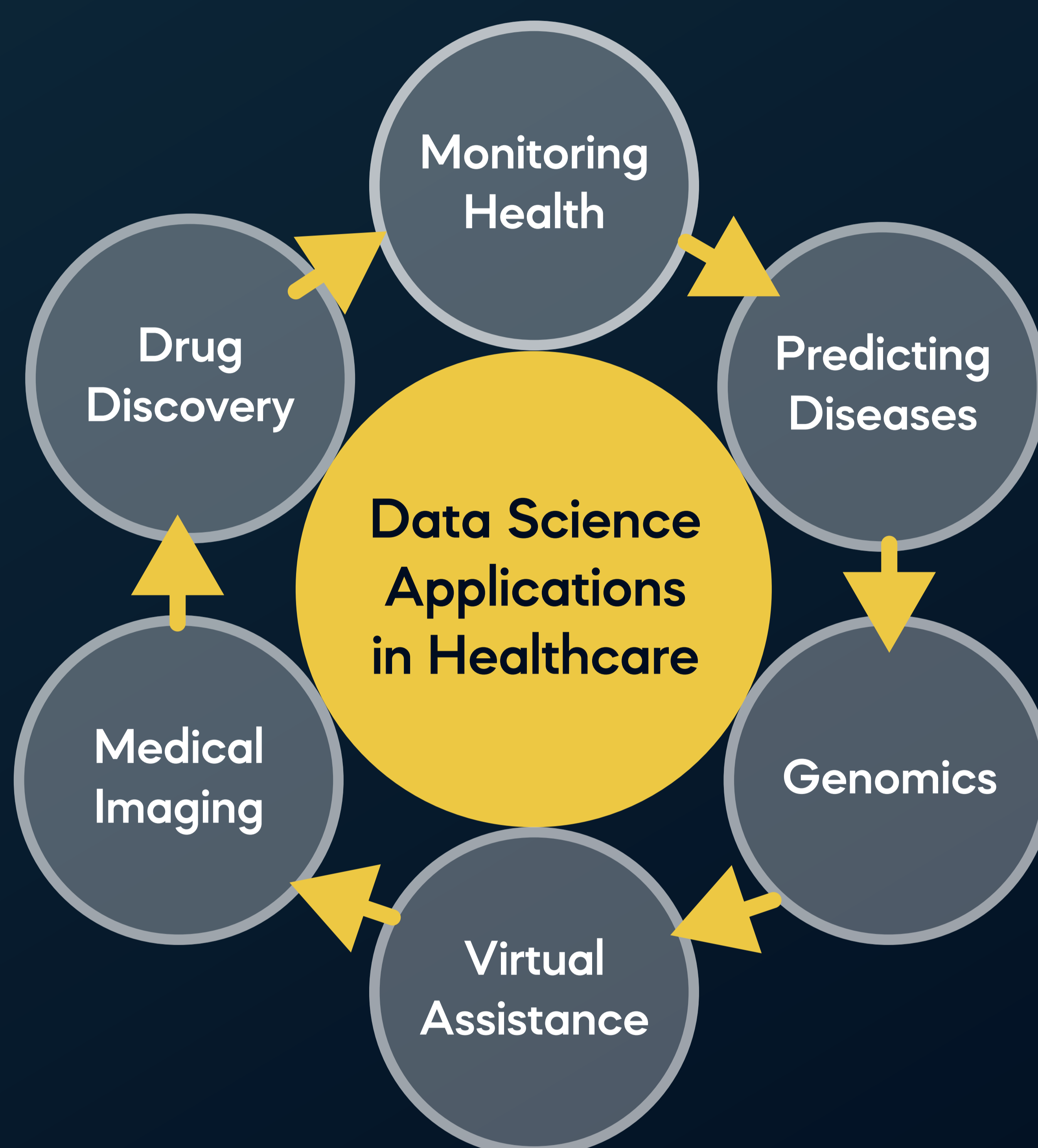
THERE ARE PLENTY OF APPLICATIONS OF DATA SCIENCE IN THIS INDUSTRY. AMAZON, NETFLIX, GOOGLE, META, AND APPLE USE DATA SCIENCE TO IMPROVE USER EXPERIENCE, BUILD PERSONALIZED RECOMMENDATION SYSTEMS, CREATE INNOVATIVE SOLUTIONS, ETC.



Landing a job in a Big Tech firm requires a lot of hard work, but it's well worth it. If you want to follow this career path, read our article on [How to Become a Data Scientist in a Big Tech Company](#).

HEALTHCARE

The healthcare industry's demand for skilled data scientists is increasing along with the growing quantity and importance of big data in the sector. Big data is the key to discovering innovative solutions and improving healthcare quality. At the same time, it can lead to greater efficiency, thus, reducing expenditures.



The primary data science skills expected from a healthcare data scientist are statistics, R, machine learning, storytelling, and Python. Of course, gaining some prior experience as a big data scientist in any other industry will undoubtedly open the door to a data science career in healthcare. If that's the career path you want to pursue, check out our article on [How to Become a Data Scientist in Healthcare](#).



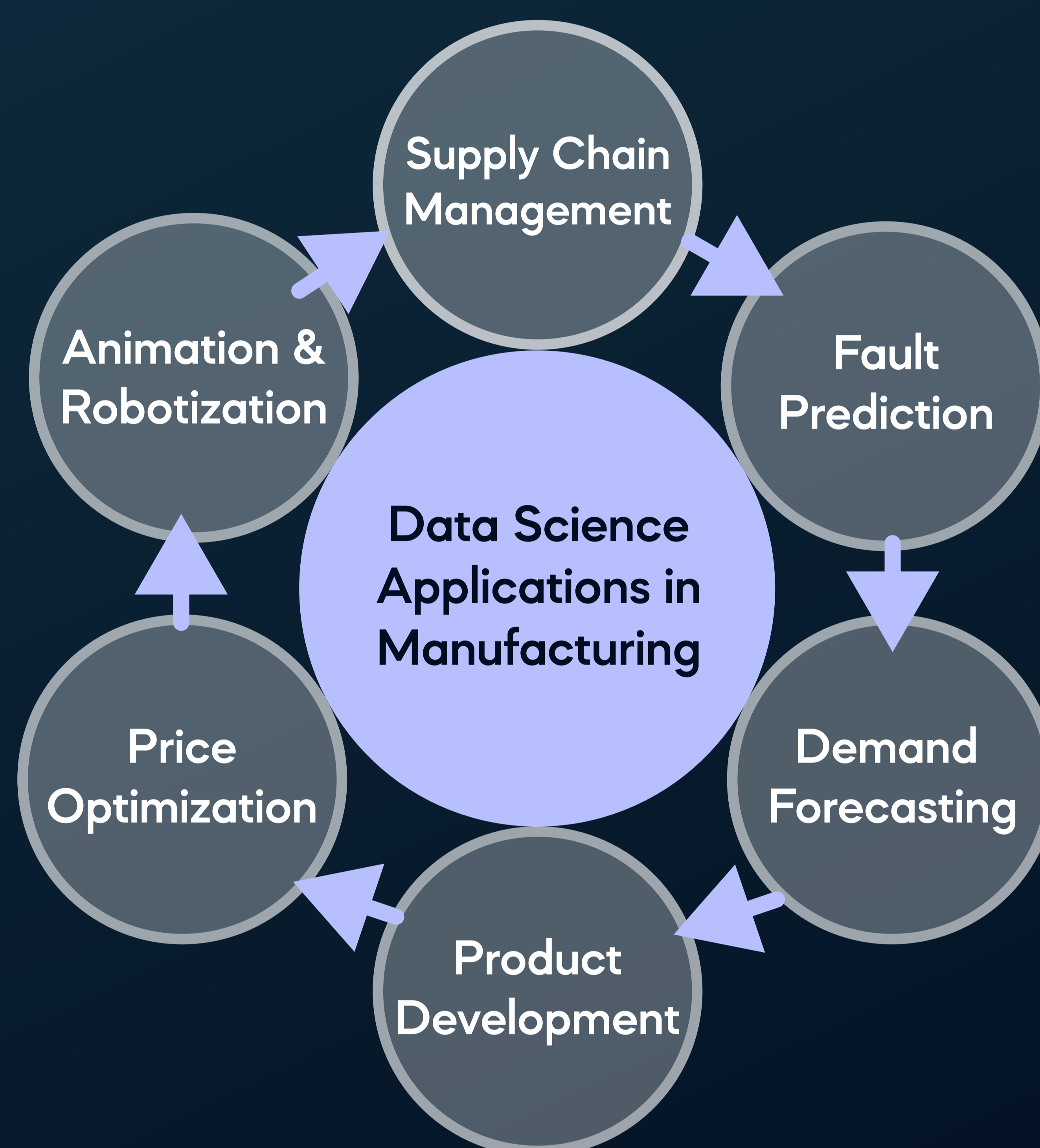
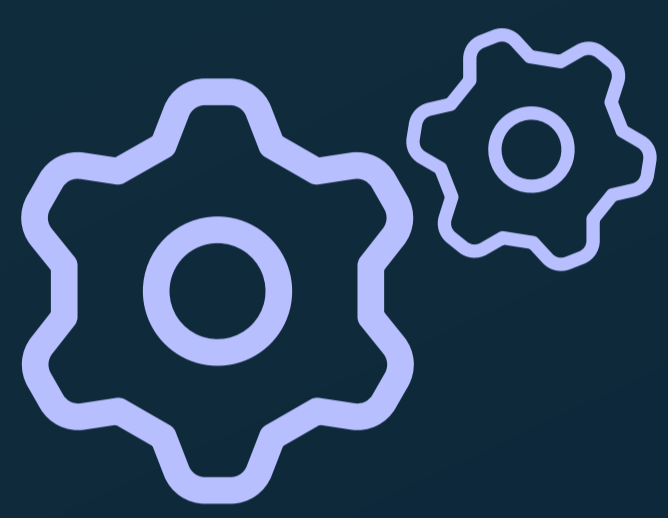
Upskilling with Data Science

If you're already working in the healthcare industry and want to take your career to the next level, 365's data science courses offer the best way to do it. Read the story of Meghan Verschoor's success after studying with 365 for inspiration.

[READ FULL STORY](#)

MANUFACTURING

Have you heard about Oden Technologies? This company has developed the revolutionary Industrial Internet of Things (IIoT) platform that helps manufacturers optimize their processes and see how the changes they make affect production in real-time. And that's just one example of how data science is becoming an indispensable factor for the success of present-day manufacturers.



AI-POWERED INDUSTRIAL ROBOTS, PRODUCT DEVELOPMENT, AND COMPUTER VISION MONITORING SYSTEMS ARE BOUND TO BECOME MORE COMMON.

This makes perfect sense. They increase quality and therefore bring more benefits to companies.

IF YOU'RE LOOKING FOR GREAT CAREER OPPORTUNITIES IN THE LONG RUN, YOU SHOULD CONSIDER WORKING IN MANUFACTURING.

Types of Organizations to Consider

Once you've set your eyes on an industry for your future career development, you should research the types of data science organizations available. There are plenty of great options out there. Knowing what companies offer will help you decide if they suit your professional needs.

DATA SCIENCE

CONSULTING COMPANIES

Data science consultancies offer outstanding remuneration packages and development opportunities. If you're on the data scientist career path, you shouldn't sell yourself short. On the contrary, start researching the top companies in the field. You can begin with our top three picks to see if a big consultancy is a suitable environment for you.



Bain & Company

Bain & Company's three main fields of specialization include **advanced analytics, big data, and research**. It advises global leaders on financial matters, operations, market analysis, strategy, transformations, and more.

Why Work There

The company has achieved great numbers since its very beginning in 1973. It has worked with 63% of the Global 500 and operates in 40 countries worldwide. It also offers many benefits, such as:

- An incredible work culture
- Unlimited sick leave policy
- Excellent health insurance
- A performance-based bonus system

Types of Projects

There is a wide variety of projects and work opportunities for data scientists and analysts at Bain. The company provides consulting services in:

- Cost transformation
- Learning and development
- Business transformation
- Sales and marketing
- Strategy, operations, and many more



Accenture Analytics

Accenture Analytics is number 17 on **Fortune's 2022 World's Best Workplaces** list. The company provides various services, including (but not limited to) strategy, operations, management, and technology consulting. It operates in over 200 cities across 49 countries and serves more than 9,000 clients.

Why Work There

The benefits of working at Accenture are numerous. In addition to the diverse and impressive professional experience, you will receive the following:

- Excellent financial rewards to recognize employees' skills and contributions
- Paid holidays and time off
- Life insurance, health insurance, and disability coverage

Types of Projects

As a data scientist at Accenture, you will be expected to perform the following tasks:

- Develop AI-driven solutions for businesses
- Use analytics and machine learning to unlock the value in unstructured data
- Support decision-making by generating rapid insights



Appsilon

Appsilon is a **100% remote company** operating across five continents. It delivers data science, analytics, and computer vision solutions, such as object detection, satellite image analysis, and image classification. Moreover, Appsilon started the "Data for Good" initiative that focuses on solving environmental problems.

Why Work There

In addition to the diverse professional development opportunities, the company offers excellent benefits, such as:

- Good work-life balance and an entirely remote working environment
- Flexible hours, 26 vacation days, and a professional development budget
- Life insurance and private health care
- Fair compensation policy and pay raise

Types of Projects

Data scientists at Appsilon work on intriguing and impactful projects, such as:

- Data science and machine learning support to help limit GHG emissions
- Using computer vision to preserve wildlife
- Using computer vision to monitor remote ecosystems in real time

DATA SCIENCE STARTUPS

Startups allow you to face challenges independently and wear multiple hats. Working in one can help you grow your skillset tremendously in a relatively short time. This rings especially true if you compare it to working in large corporations, where it may take years of repetitive tasks before climbing up the data science ladder. Not sure if it's worth it? We provide an overview of [the 10 best startups to work for](#) to give you an idea of what you can expect. You can start by reading about our top three picks below.



Starworx

Based in Germany, [Statworx](#) is a data science and AI consultancy that uses the power of data science, machine learning, and AI to **develop tailor-made solutions for companies in different industries**. In addition, Statworx has two active initiatives (AI & Society and AI & Environment) aiming to contribute to positive societal and environmental development.

Why Work There

In addition to the various professional development opportunities, Statworx offers the following:

- Work flexibility and the option to choose the best location for you to work from
- A healthy work environment with modern setups and top-notch equipment
- Involvement in exciting projects with international companies

Types of Projects

- Working with non-profit organizations to teach children data science
- Developing an interactive platform to bring AI closer to society
- Cooperating with other companies to develop AI applications aiming to help resist climate change and maintain ecological sustainability



Oden Technologies

[Oden Technologies](#) uses IoT and advanced analytics to help companies in the manufacturing industry optimize their performance and achieve better efficiency. It provides a **range of advanced solutions and real-time alerts** to prevent failures, analytics software to minimize downtime, and an IoT suite to solve everyday problems in factories.

Why Work There

Oden Technologies offers excellent work benefits.

- Flexible work hours and a retirement plan option
- Health insurance, unlimited vacations, and sick leave
- Healthy nutrition and social outings

Types of Projects

- Develop IoT solutions to optimize performance and reduce costs in manufacturing.
- Help manufacturers detect the root cause of quality failure using diagnostic analysis and predictive analytics.
- Help manufacturers increase productivity and reduce labor hours using techniques like real-time analysis.



Algorithmia

[Algorithmia](#) is a leading startup in machine learning operations acquired by **Data Robot in 2021**. It provides machine learning services helping companies in various industries to improve their model management, monitoring, and governance capabilities.

Why Work There

Working for Data Robot comes with decent benefits.

- Flexibility in sick leave and time off
- Summer outings and holiday parties for the team
- Excellent medical insurance and commuter benefits

Types of Projects

- Assist organizations in building, running, and monitoring machine learning models.
- Help businesses integrate automated intelligence into their work, create rules for deployment production, receive visual insights to monitor models, etc.
- Work on developing no-code AI apps using decision intelligence.

GOVERNMENT DATA SCIENCE JOBS

Although there may be more popular career choices, government data science employment provides excellent opportunities for career development. An increasing number of countries realize the importance of data-driven innovation and the socio-economic benefits it can bring.

For example, in [The US Climate Resilience Toolkit](#) project, the US federal government has developed a catalog of more than **200 digital tools** to boost climate resiliency. This indicates a positive outlook for data science careers—most prominently, data analysis, analytics, and big data analytics careers.

**SO,
HOW DO YOU
OBTAIN A
GOVERNMENT DATA
SCIENCE JOB?
FOR STARTERS, YOU
CAN VISIT ONE OF
THE FOLLOWING
GOVERNMENT
JOB DIRECTORIES:**

USAJOBS

If you're based in the US and you want to explore a wide scope of data science career opportunities.

[ACCESS HERE](#)

GOV.UK

The UK government is also recruiting top-notch data science talent. Check for job openings at the Office for National Statistics, the Office of Gas and Electricity Markets, or the Cabinet Office.

[ACCESS HERE](#)

Govt Jobs Portal.in WORKING FOR INDIA

Although finding a government data science job in India is challenging, there are plenty of IT and computer science positions that can serve as a stepping stone to your future data science career.

[ACCESS HERE](#)

Ready to Take the Next Step?

Now that you're aware of the data science employment options, job outlook, and types of roles, you're ready to embark on your career journey.

But there's one more thing to remember—anything worthwhile takes time and hard work. So, continue learning and improving your skills. **Don't stay still**; master different technologies, and opportunities will show up.

We covered a lot in our guide, and you might feel slightly overwhelmed. Our 10-point checklist will guide you to a successful data science career.

BUILDING A DATA SCIENCE CAREER:

10-POINT CHECKLIST

- ✓ Familiarize yourself with the data science basics and applications (data strategy, data literacy, data-driven business growth).
- ✓ Learn the theoretical concepts behind data science (Mathematics, Probability, Statistics).
- ✓ Start with programming languages for data science (Python, R, SQL).
- ✓ Perfect your visualization skills (Power BI, Tableau, Python, R, Excel).
- ✓ Start building your project portfolio.
- ✓ Create a professional network by joining data science discussions and events.
- ✓ Build your online presence and establish yourself as an expert.
- ✓ Research different roles, industries, and data science companies.
- ✓ Look for data science jobs and organizations you'd like to work for.
- ✓ Be proactive and approach hiring managers.

Resources

Starting a career in data science is an exciting and challenging adventure. Our comprehensive guide has prepared you to embark on this journey, but we won't let you go unarmed. Below, you'll find our recommended articles, courses, books, portfolio ideas, tools, and websites to support your studies and work. We've organized a complete list of resources you can refer to whenever you need help.

RECOMMENDED ARTICLES



[How to Become a Freelance Data Scientist in 2022: A Comprehensive Guide](#)



[Tips and Advice on How to Get Your First Data Science Internship](#)



[How to Become a Data Scientist with No Experience in 2022?](#)



[Defining Data Science: The What, Where and How of Data Science](#)



[Data Scientist Career Path: How To Become a Data Scientist](#)



[Most Wanted Data Science Courses of 2022](#)

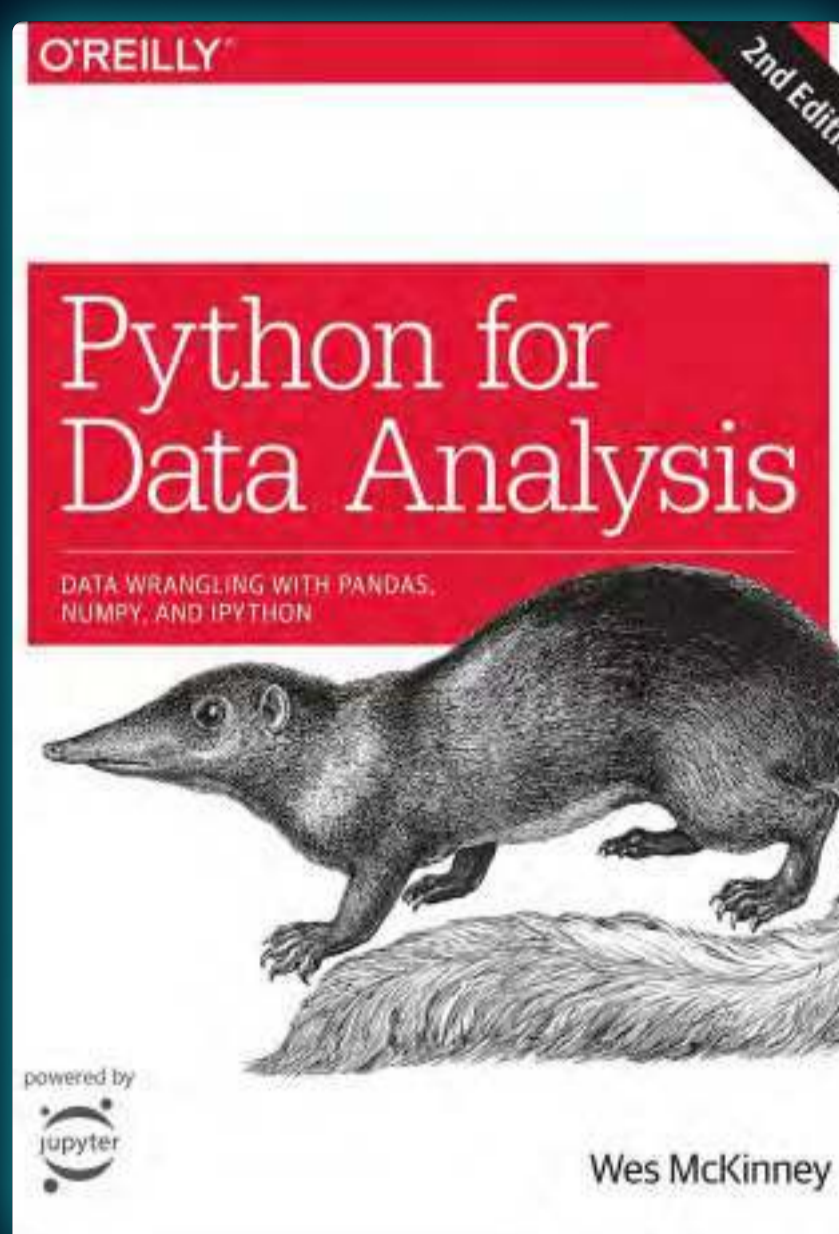


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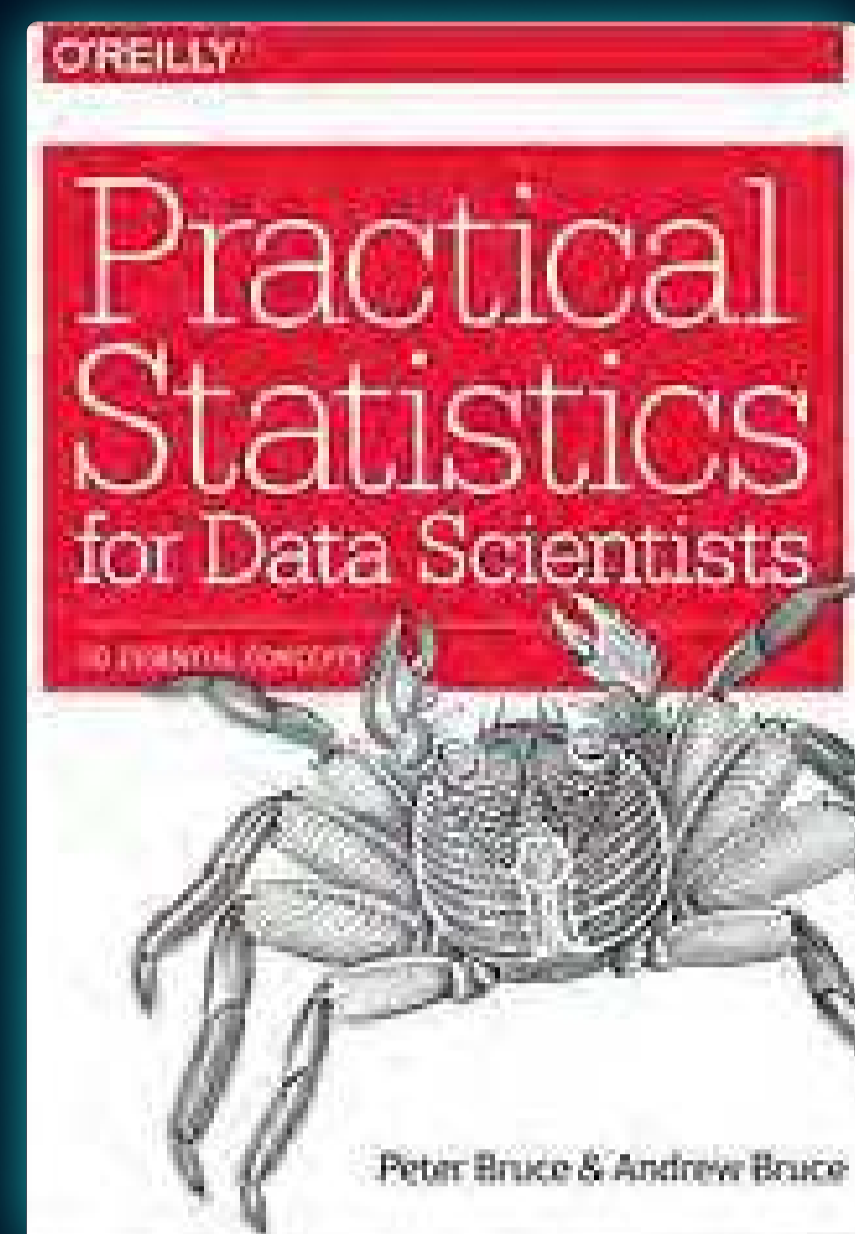
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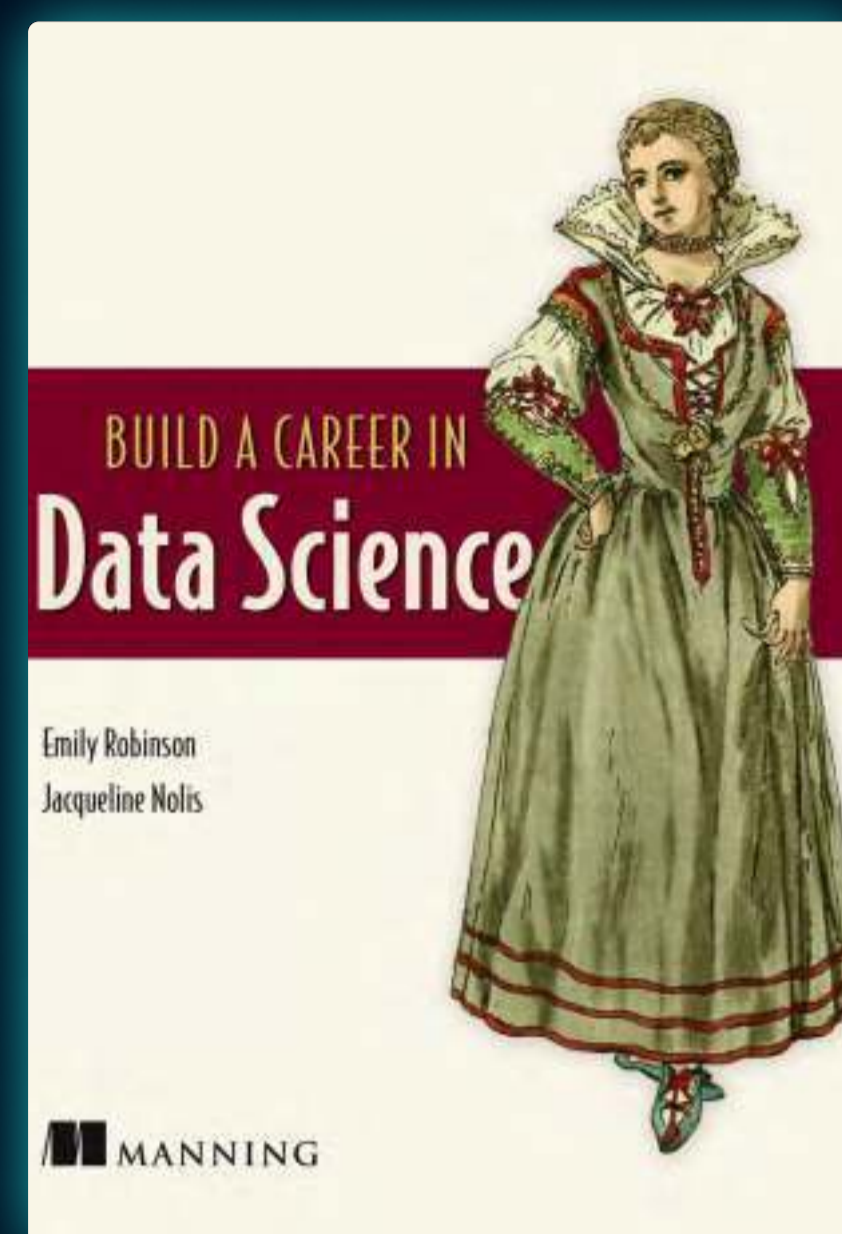
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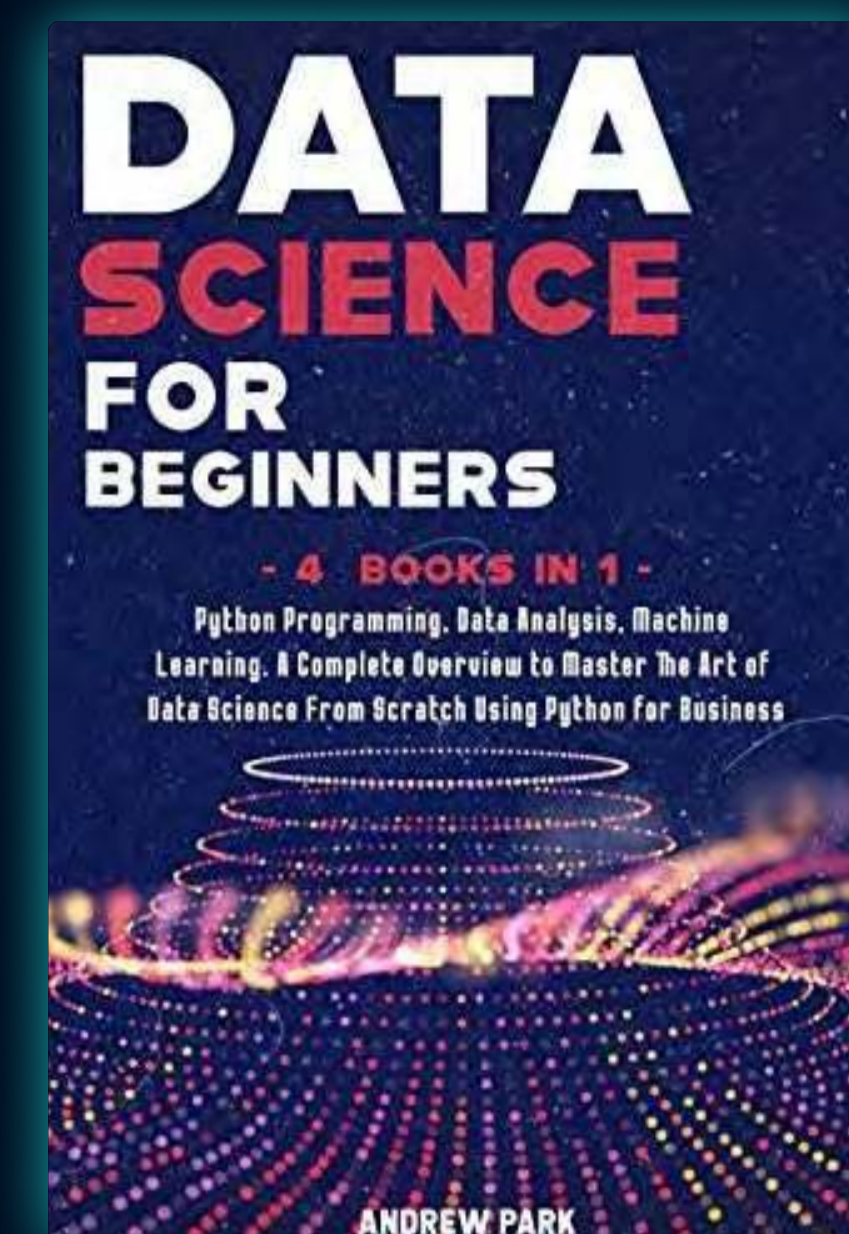
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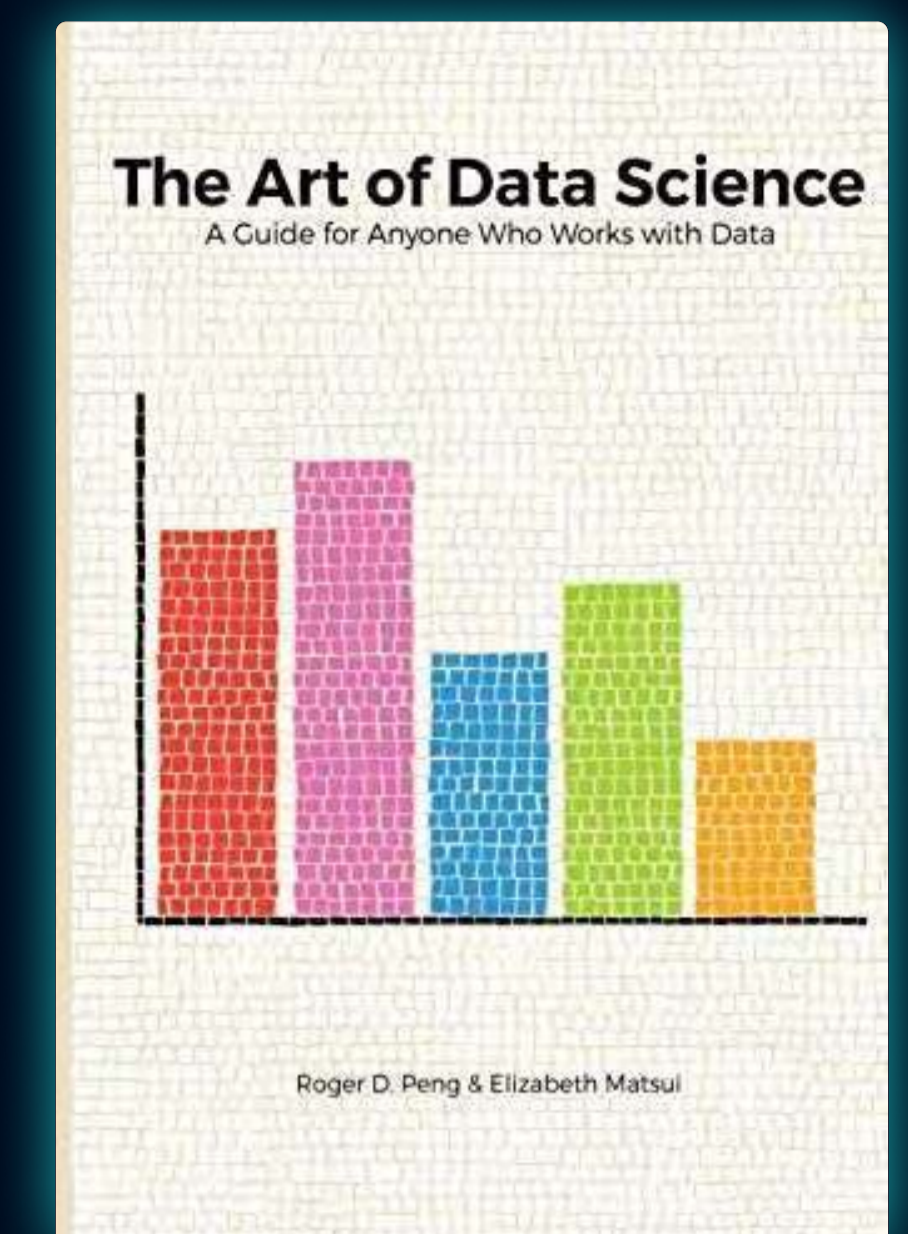
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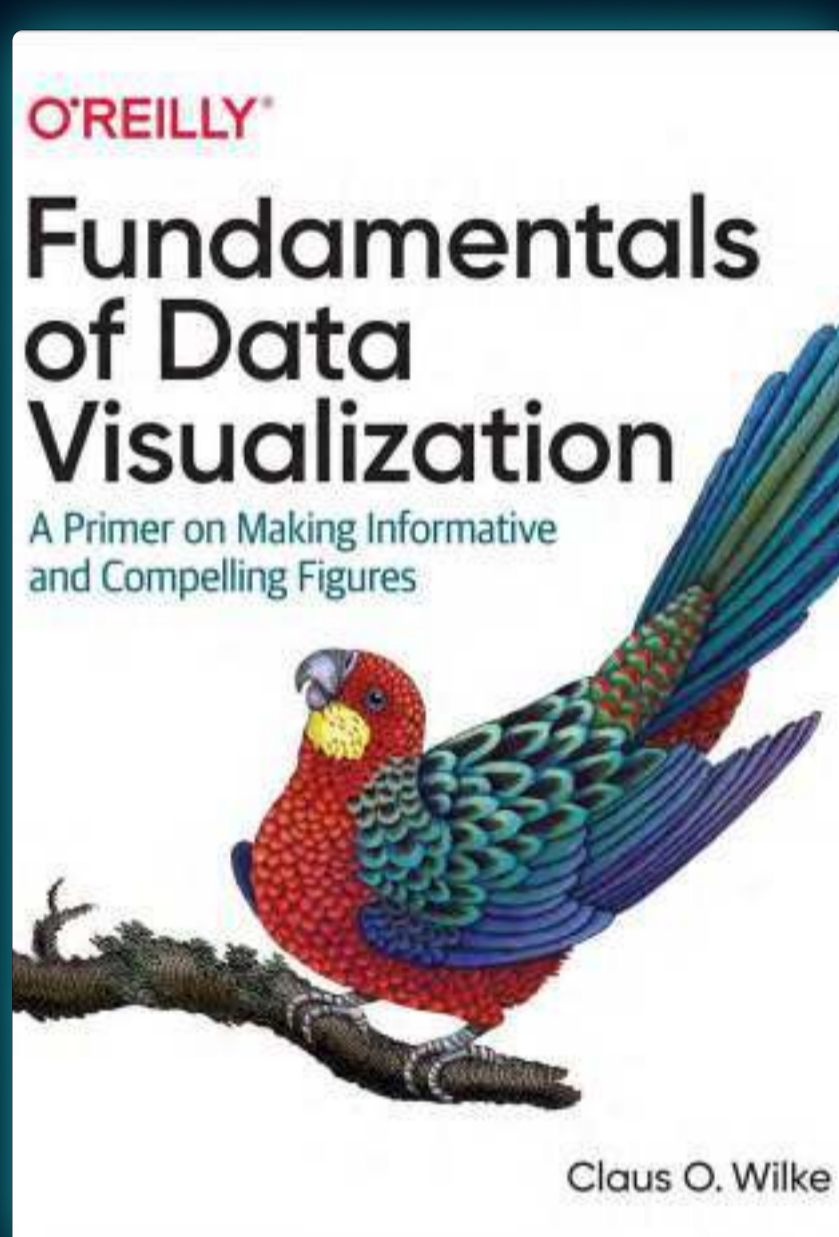
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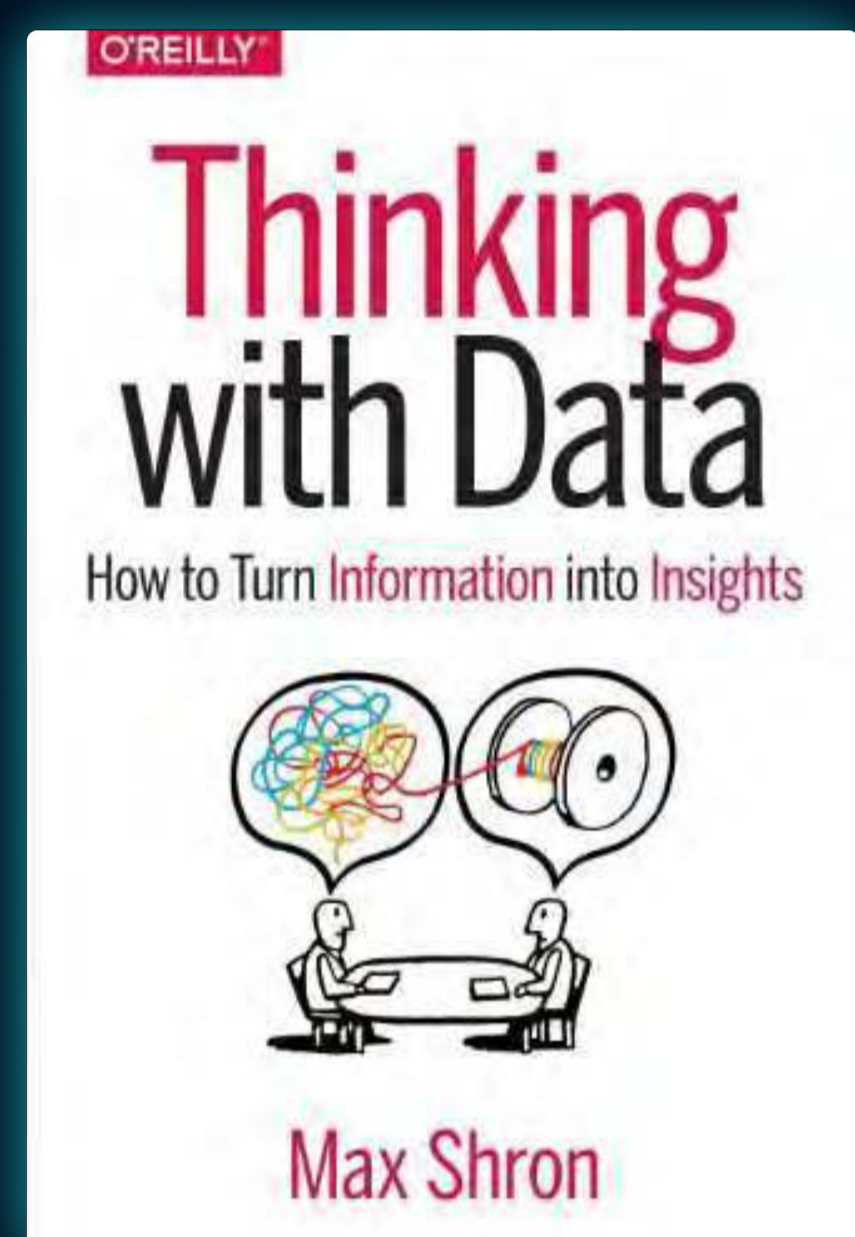
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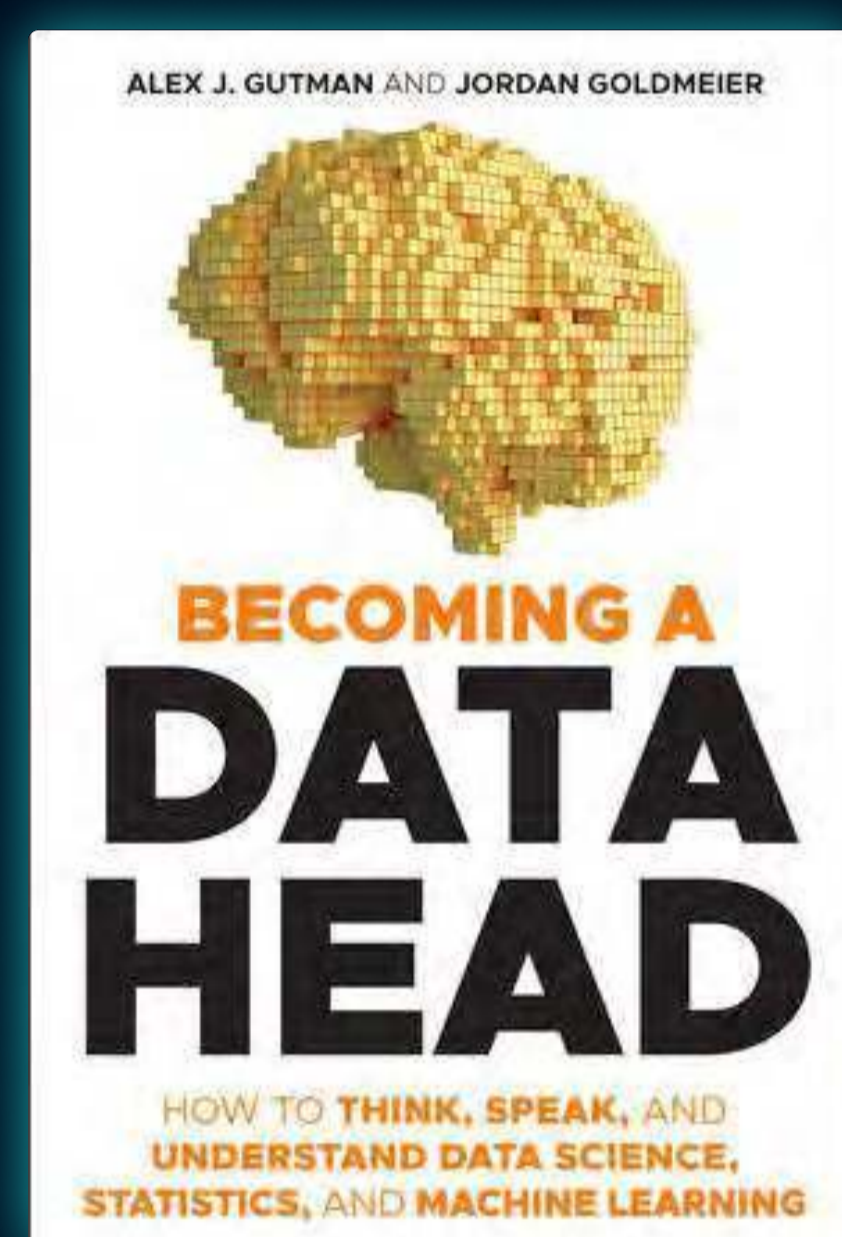
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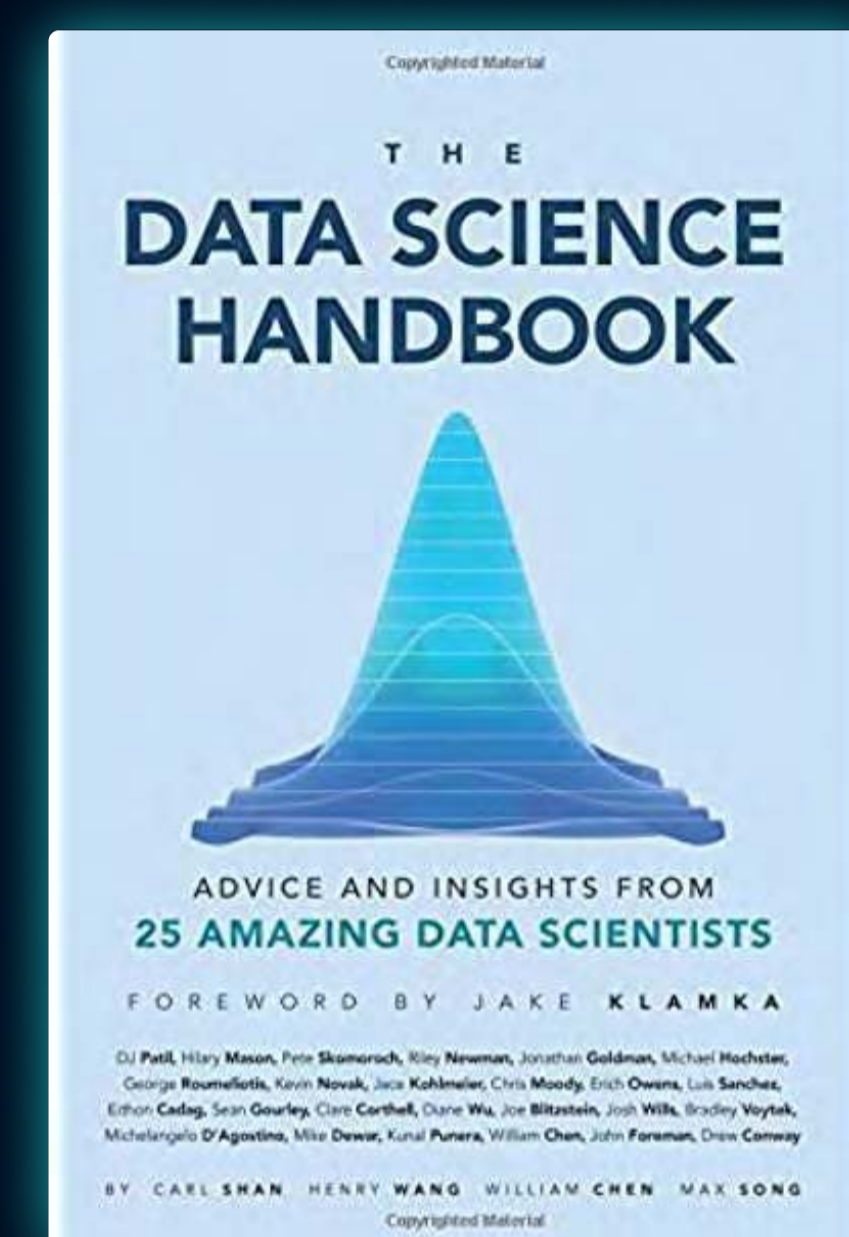
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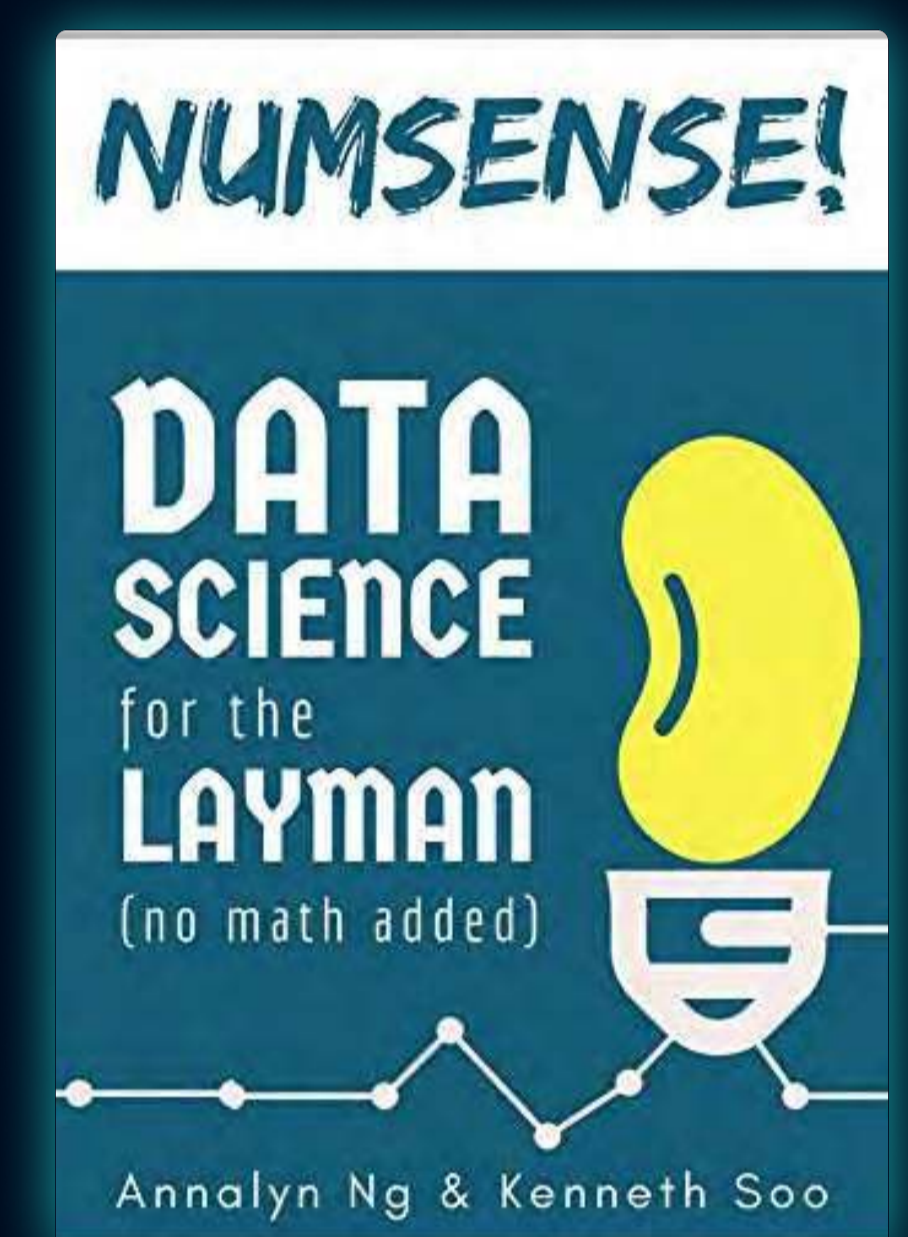
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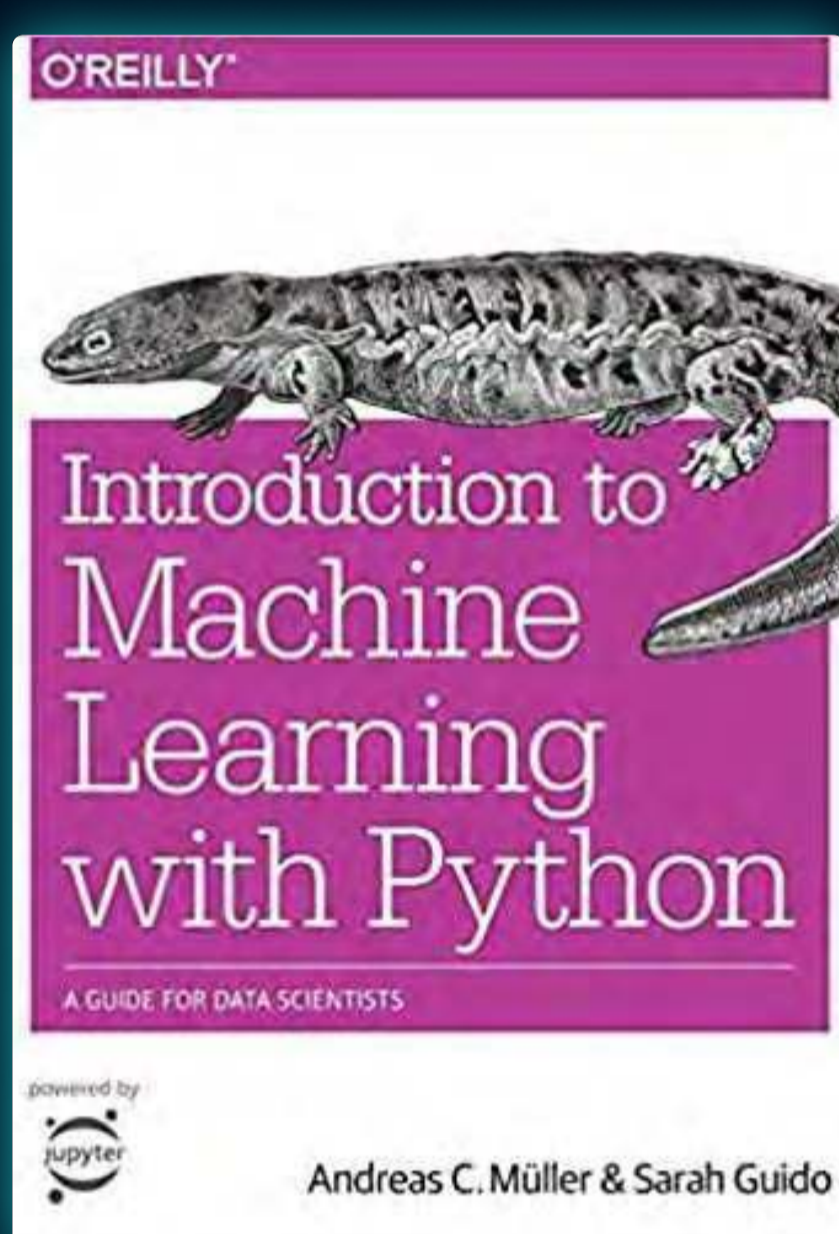
The Data Science Handbook

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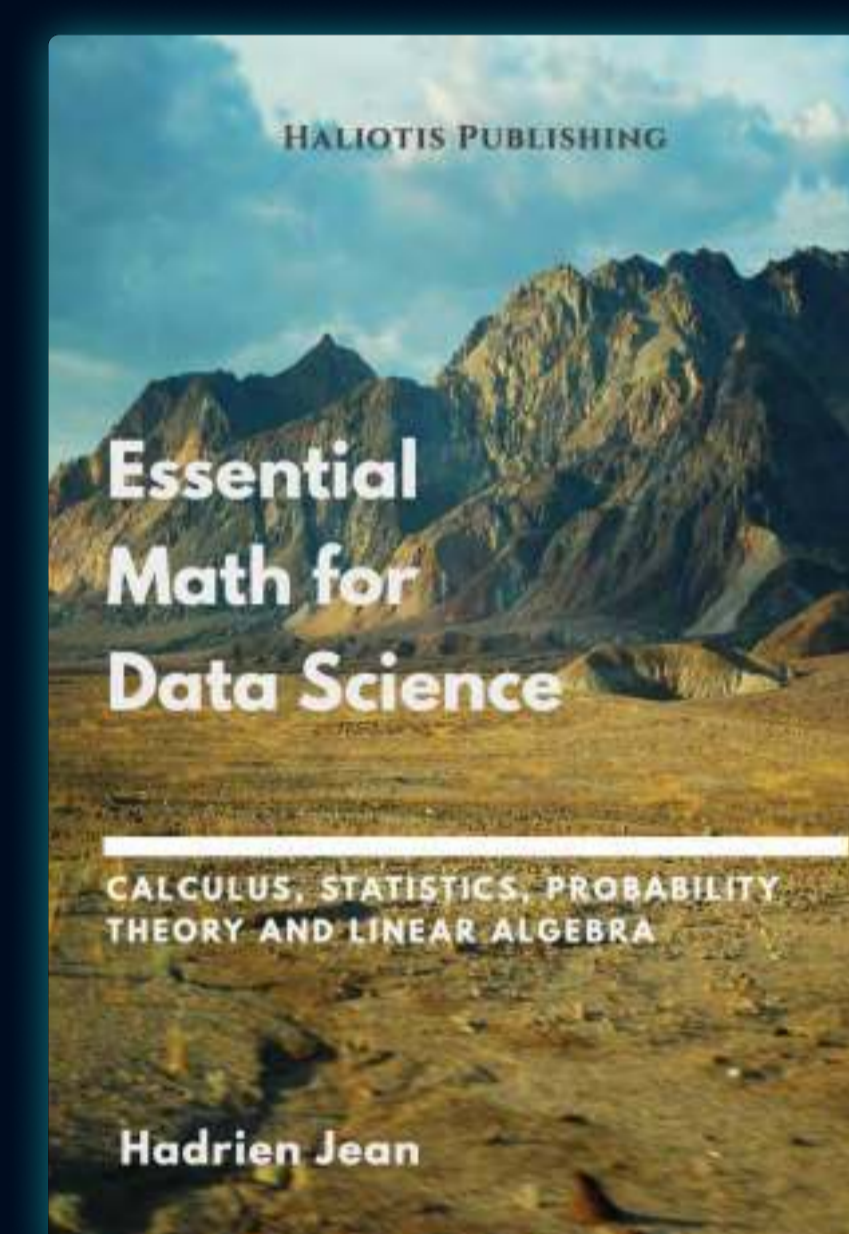
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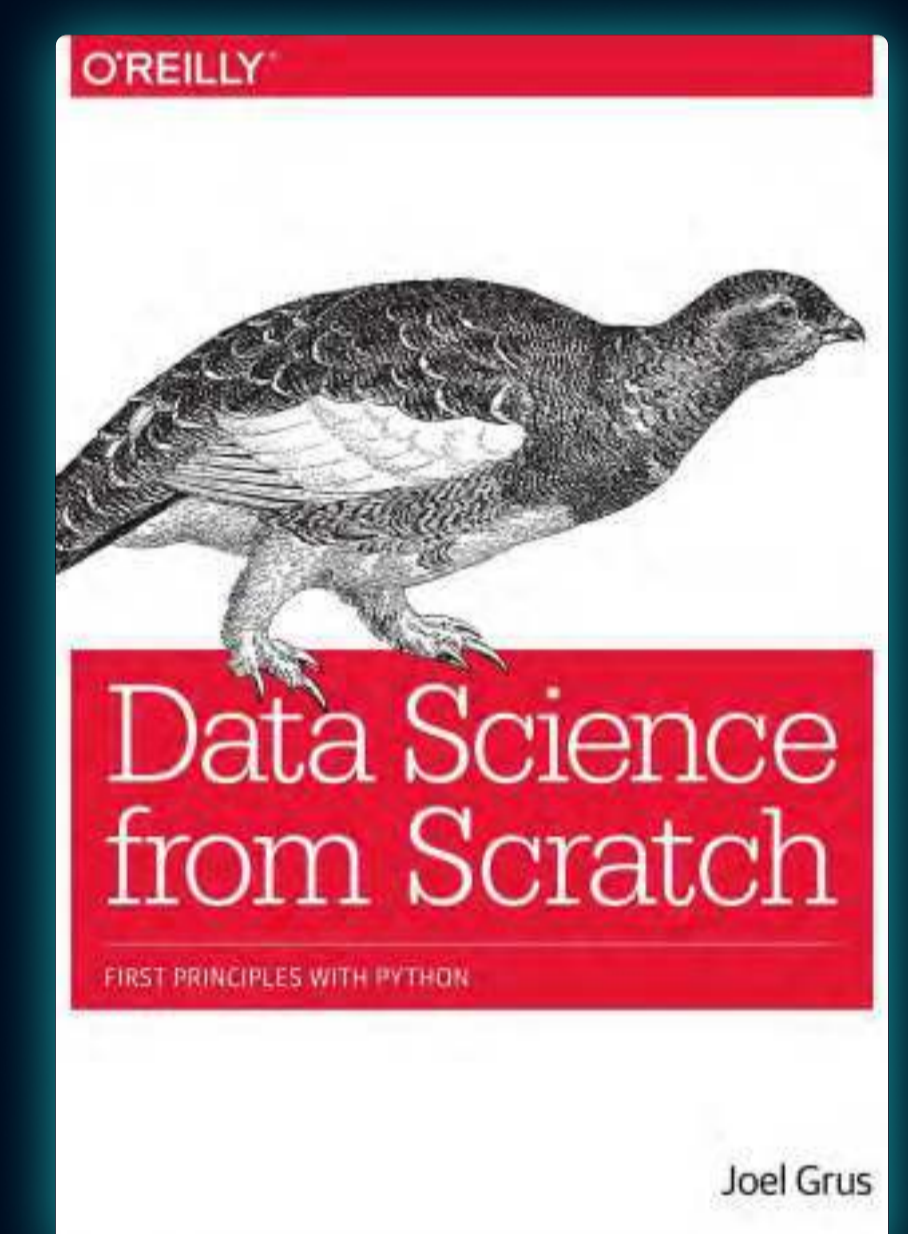
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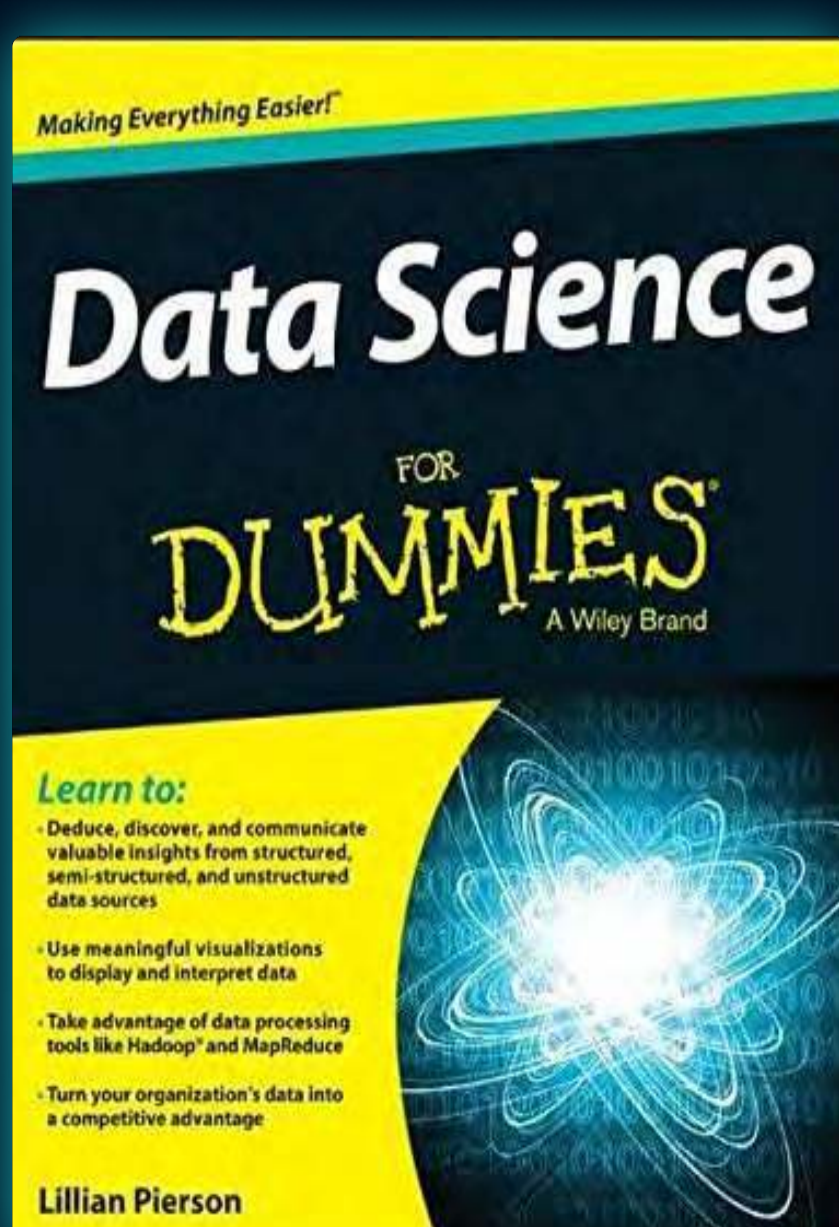
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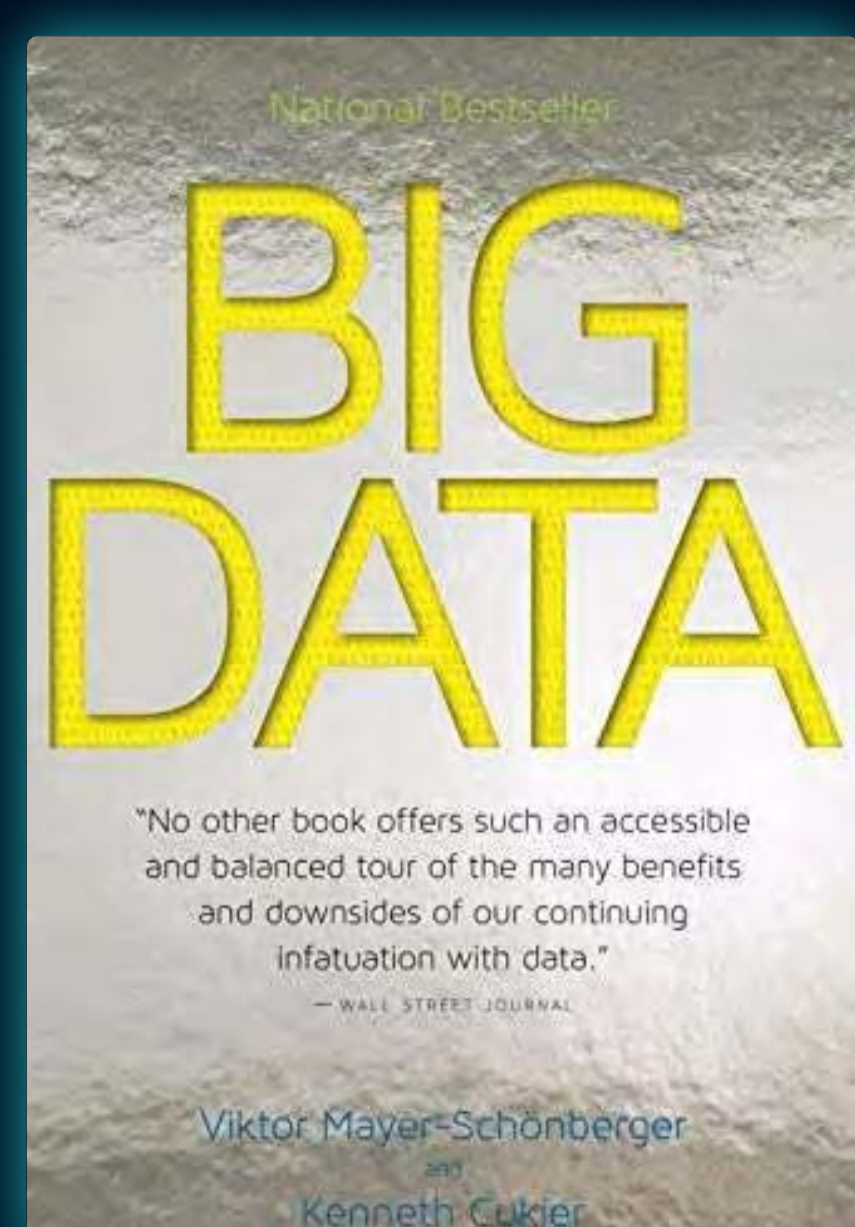
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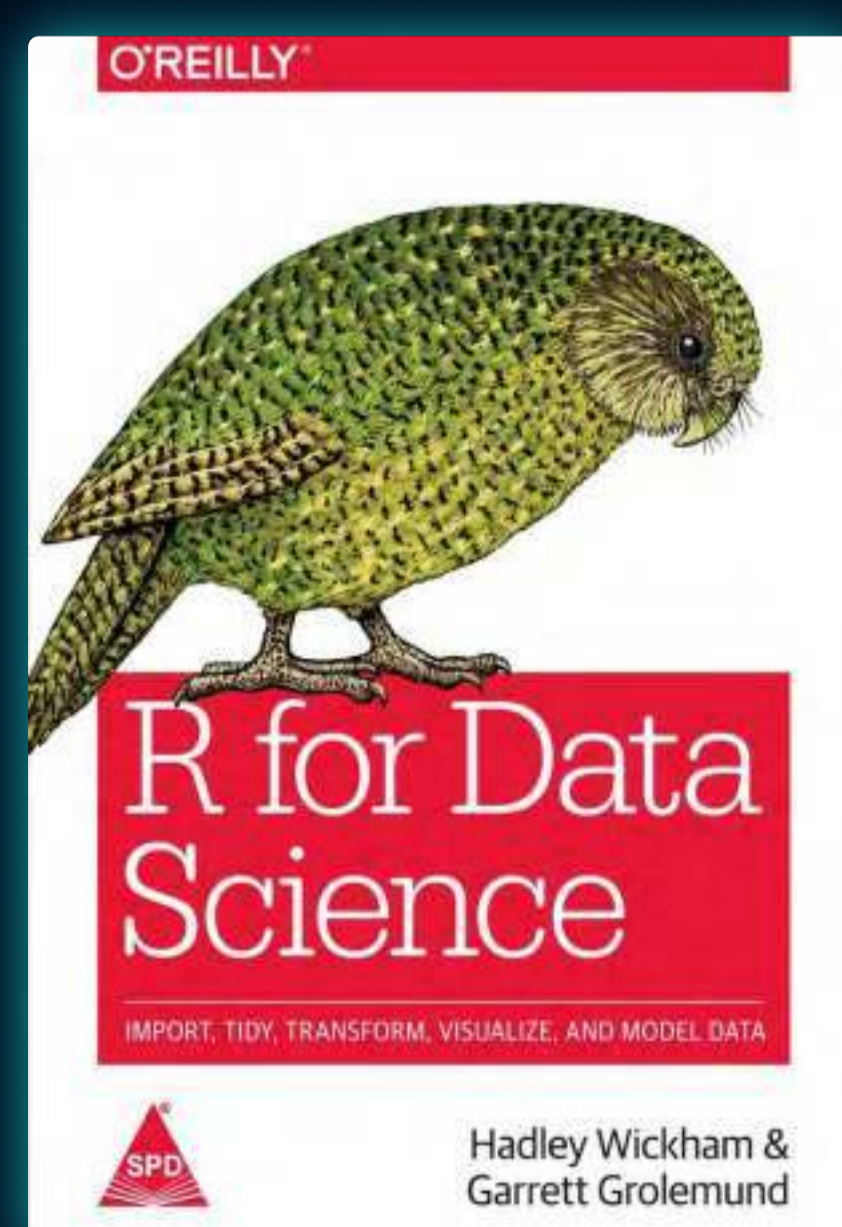
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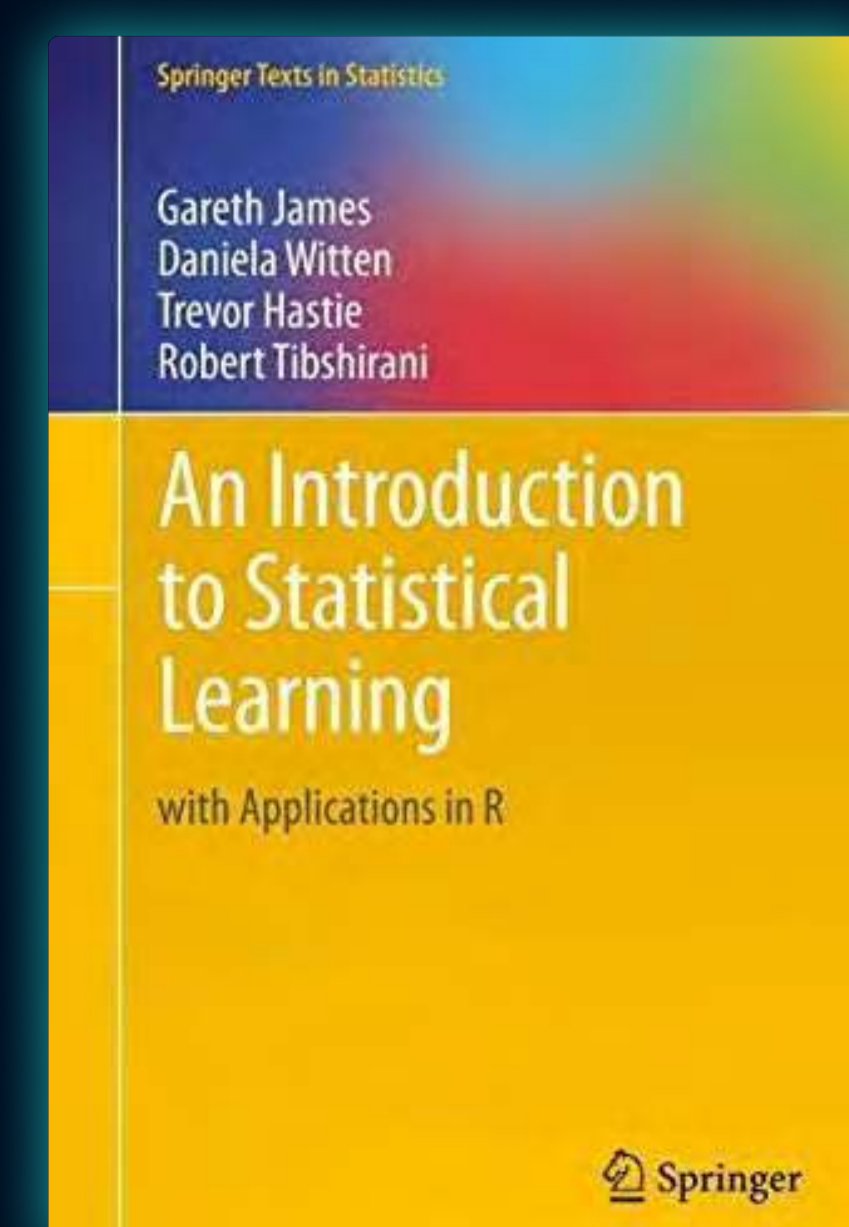
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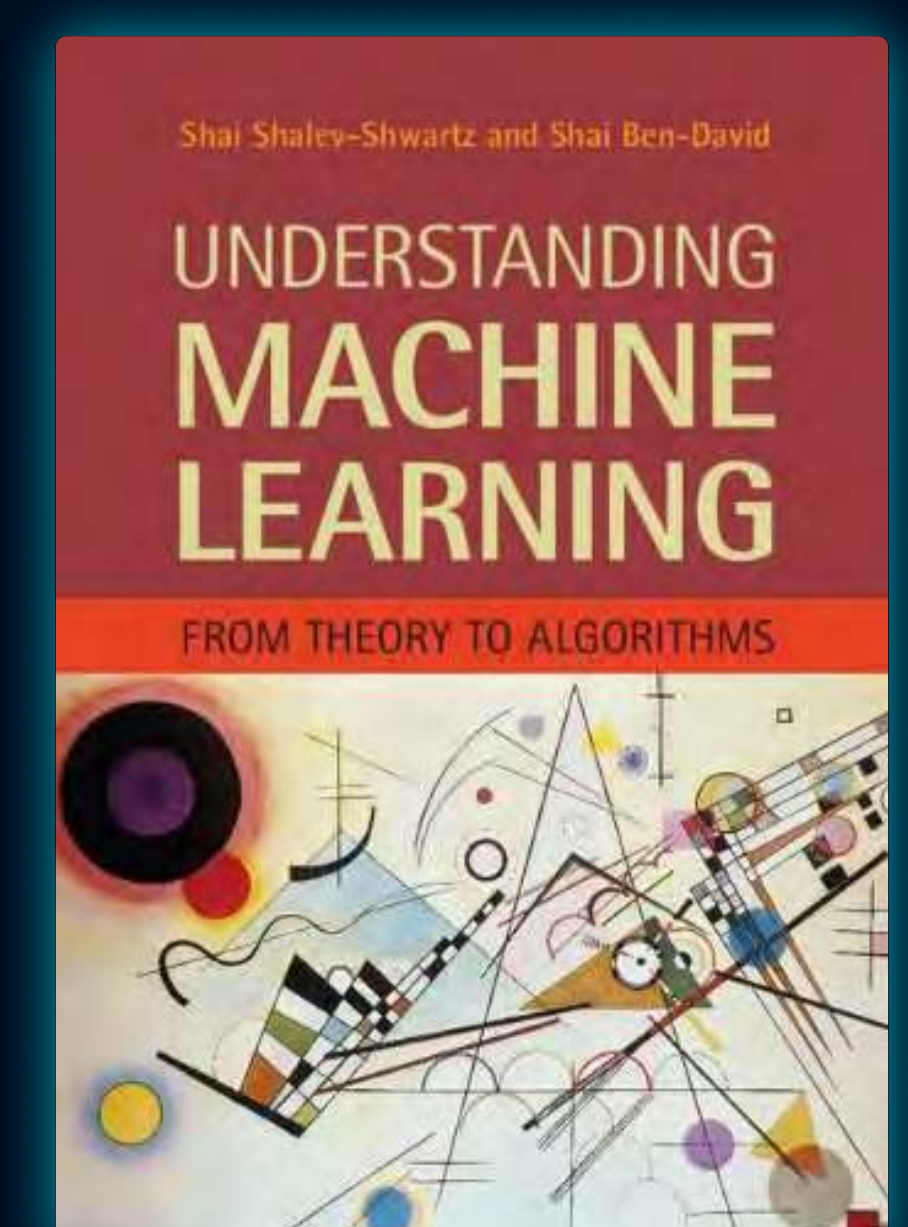
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PORTFOLIO & INTERVIEW PREPARATION

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- [JS Fiddle](#)
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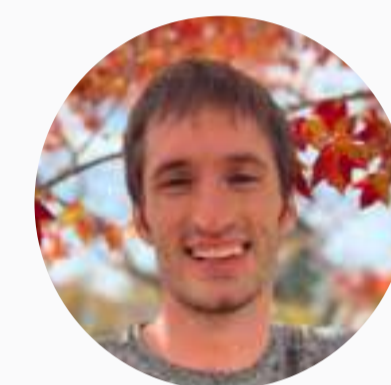


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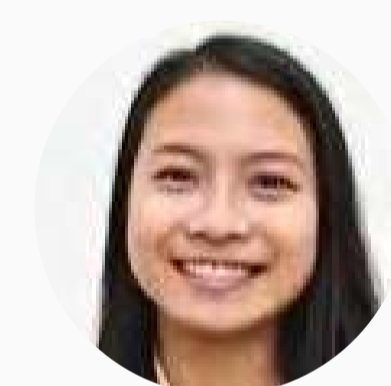


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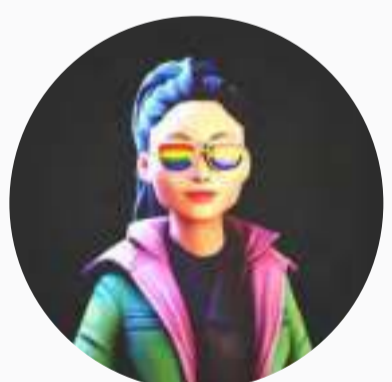


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Conclusion

With this guide, we shed some light on what you need to know to start a career in data science. We explored the most lucrative data science job roles, listed the qualifications and skills you need to become a competitive professional, and prepared you to make the first confident steps in your job search process. This will be your guide in becoming a data scientist and choosing the best career path to enter the field.

OUR FINAL PIECE OF ADVICE?

Learn with curiosity and optimism and don't be afraid to make mistakes. Just work hard, do your best, and the rest will follow.



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