2024

ARTIFICIAL INTELLIGENCE

Talent & Salary Report

UK | Europe | USA

understanding
RECRUITMENT

The Market

2023 marked a significant milestone as the Year of AI, and the transformative impact across diverse industries has been unmistakable. The seismic shifts observed over the past year are attributable to the remarkable capabilities of Artificial Intelligence (AI) in elevating efficiency, amplifying productivity, and refining decision-making processes. The intricate ability of AI to navigate extensive datasets, automate intricate tasks, and furnish invaluable insights has emerged as a driving force, fuelling innovation and establishing itself as a cornerstone in the dynamic landscape of technology.

As we propel into 2024, the evolution of Machine Learning (ML) and Artificial Intelligence continues to redefine industries and reshape the technological horizon.

Here's a glimpse into our predictions for the continued growth of AI in the coming year:

- **Explainable AI:** Transparency is essential as AI grows, with a focus on making AI decisions understandable.

- **Federated Learning:** Privacy-centric AI, where models learn from decentralised data, enhancing data security.

- **AI in Healthcare:** Personalised medicine, disease prediction, and drug discovery are advancing healthcare.

- **AI at the Edge:** Real-time AI processing on devices like smartphones, boosting responsiveness.

- **AI Ethics:** Frameworks and tools for ethical AI and bias reduction are emerging.

- **Quantum ML:** Quantum computing promises rapid solutions to complex AI problems.

- **RPA with AI:** Robotic Process Automation combined with AI streamlines business processes.

- **AI and Creativity:** AI collaborates with artists, writers, and musicians, sparking creative content.

- **AI for Climate:** AI aids in climate solutions by optimising energy and analysing climate data.

- **NLP Advancements:** Large language models enhance natural language processing for diverse applications.

Derived from LinkedIn insights and a survey of 282 professionals in machine learning, AI, and data fields, our Talent and Salary Report provides concise insights for staying ahead in AI, machine learning, research, data science, and engineering*. We hope you enjoy it!

*All data presented in this report is accurate as of its creation in December 2023.

Our 2023 Highlights

In 2023, our specialist Artificial Intelligence team facilitated a total of 132 successful placements extending across a variety of domains, including Healthcare, Ed-tech, Marketing, Web3, and GenAI, to name a few.

With a focus on Machine Learning and Data Science and Engineering placements, our team showcased remarkable expertise in seamlessly linking top-tier talent to cutting-edge opportunities within the dynamic and ever-evolving realm of Artificial Intelligence.
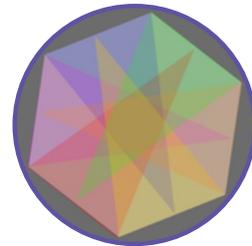
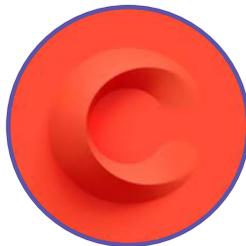## Just some of the visionary companies we worked with:

Unitary

TikTok

Polygeist

Gambit Research

Cruise

Poly AI

"Without UR, we wouldn't have handled the rapid growth needed for our AI start-up. The UR team - Anna specifically - were incredible partners in our search for new people to join Unitary. Not only did they find people with the best skills, they quickly understood our unique culture and were able to hand-pick candidates who they thought would be a good fit for us.

They were right - and here we are sitting with loads of kind, collaborative and smart people who came to Unitary via UR. Our team would not be the same without you. Thank you!"

Linnéa Belding - Head of People & Culture
Unitary

Machine Learning
Overview

United Kingdom:

2,497
Professionals with the title 'Machine Learning Engineer' in the UK talent pool on LinkedIn.

81% / 19%
The gender split in the industry, with males accounting for the majority of professionals in the UK.

1.3 Years
Is the median tenure of Machine Learning professionals in the UK before they are likely to move into a new role.

Europe:

13,743
Professionals with the title 'Machine Learning Engineer' in the European talent pool on LinkedIn.

82% / 18%
The gender split in the industry, with males accounting for the majority of professionals in Europe.

1.3 Years
Is the median tenure of Machine Learning professionals in Europe before they are likely to move into a new role.

United States of America:

14,459
Professionals with the title 'Machine Learning Engineer' in the USA talent pool on LinkedIn.

77% / 23%
The gender split in the industry, with males accounting for the majority of professionals in the USA.

1.2 Years
Is the median tenure of Machine Learning professionals in the USA before they are likely to move into a new role.

Machine Learning
Location

Where is Machine Learning talent located?

London stands out as the central hub for Machine Learning talent with 1,506 professionals on LinkedIn in the UK but let's take a closer look at other hotspots too...

London
1,506 professionals

Cambridge
119 professionals

Bristol
95 professionals

Edinburgh
77 professionals

Manchester
70 professionals

In Europe, **London leads the way again**, closely followed by Paris, and the Netherlands.

London
1,506 professionals

Paris
846 professionals
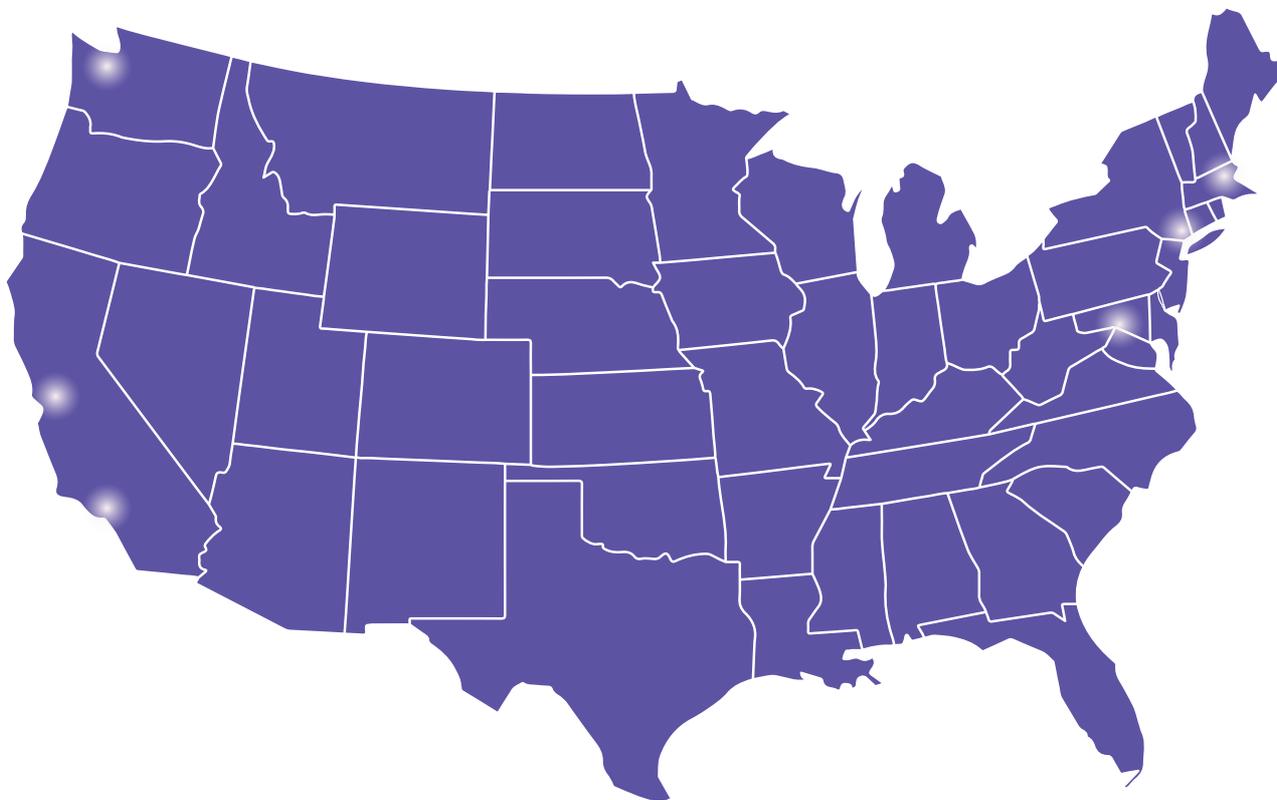
Netherlands
675 professionals

Berlin
563 professionals

Munich
455 professionals

In the United States, **San Francisco claims the top spot for Machine Learning talent**, surpassing New York City by 64%. New York City secures the second position, with Greater Seattle closely following as the third-ranking hub.

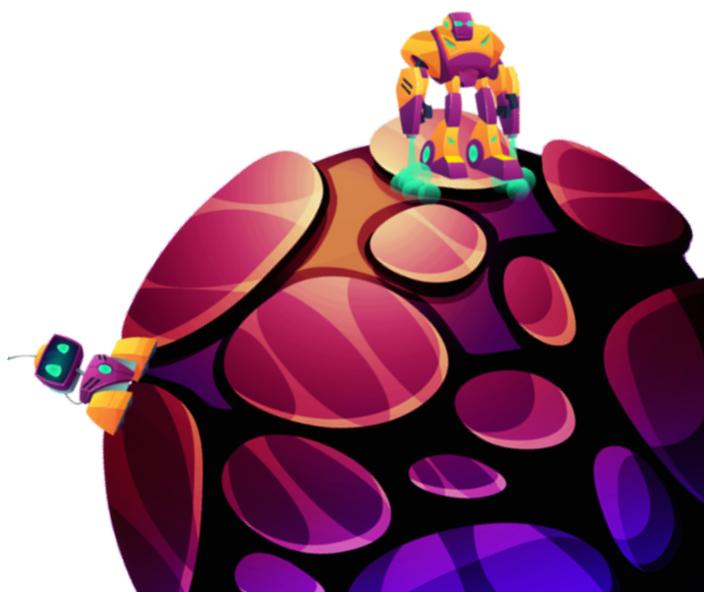**San Francisco**
4,742 professionals

New York City
1,691 professionals

Greater Seattle
1,123 professionals

Greater Boston
754 professionals
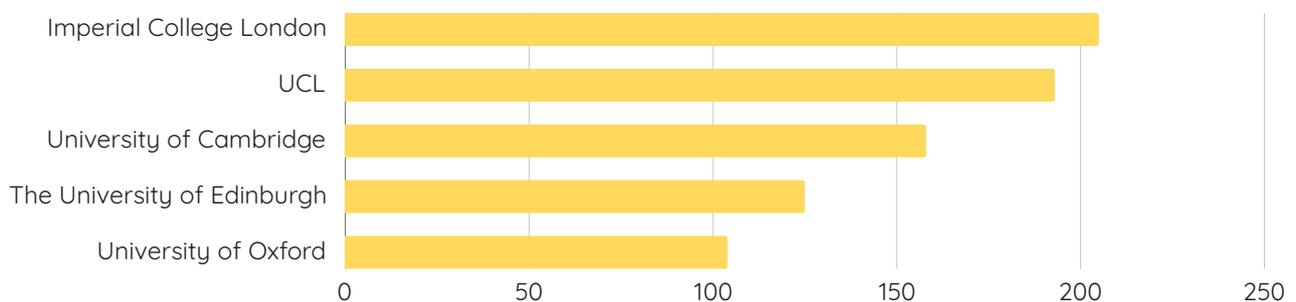
Los Angeles
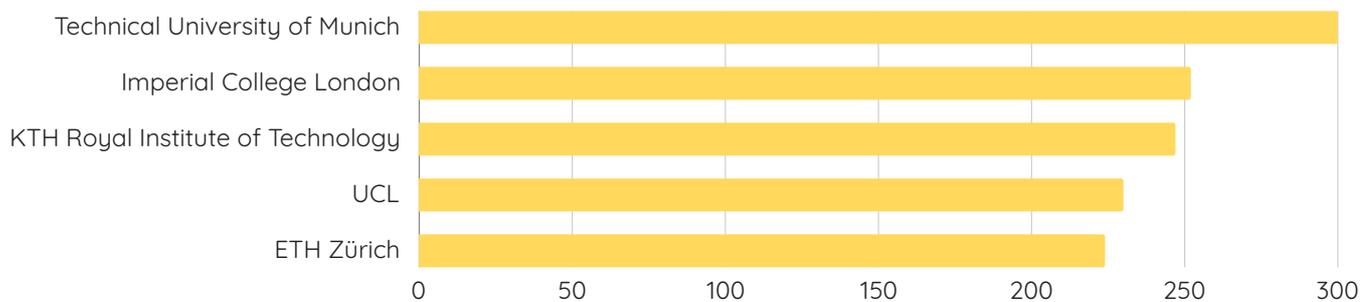651 professionals

Washington DC
624 professionals

Machine Learning
Universities Producing Talent

In this section, we explore the academic backgrounds of machine learning professionals in the UK, Europe, and the US, spotlighting the varied institutions that have been instrumental in shaping their expertise.
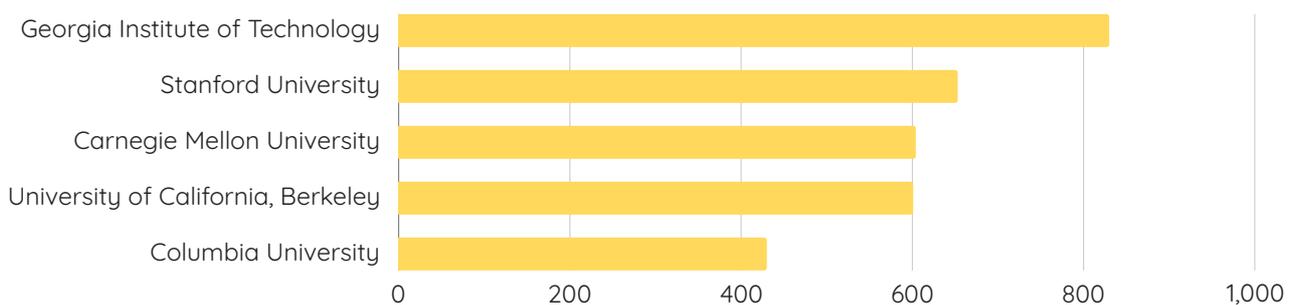
UK

University	
Imperial College London	~205
UCL	~192
University of Cambridge	~158
The University of Edinburgh	~125
University of Oxford	~103

Europe

University	
Technical University of Munich	~300
Imperial College London	~253
KTH Royal Institute of Technology	~250
UCL	~235
ETH Zürich	~225

USA

| University	
Georgia Institute of Technology	~825
Stanford University	~650
Carnegie Mellon University	~610
University of California, Berkeley	~600
Columbia University	~430

Machine Learning
Degrees & Fields of Study

Let's explore the educational backgrounds of machine learning professionals, uncovering a range of degrees and fields of study. From computer science and artificial intelligence to mathematics, these experts bring a mix of specialised knowledge to the table.
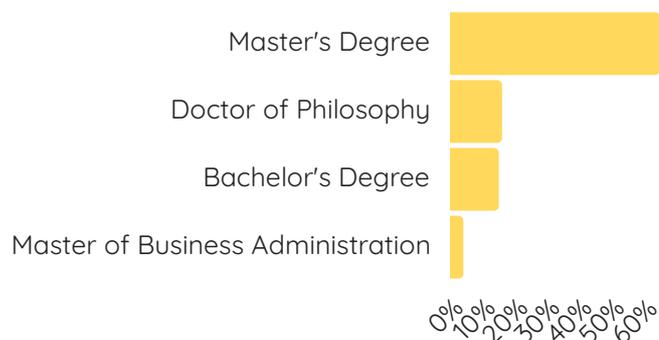
UK Professionals

1. **Computer Science** - 885
2. **Computational Science** - 713
3. **Mathematics** - 430
4. **Physics** - 424
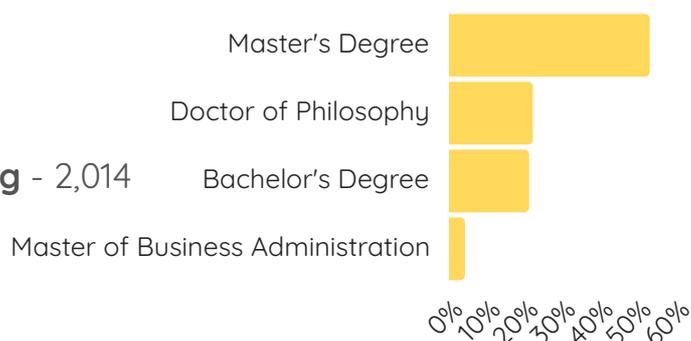5. **Artificial Intelligence** - 311
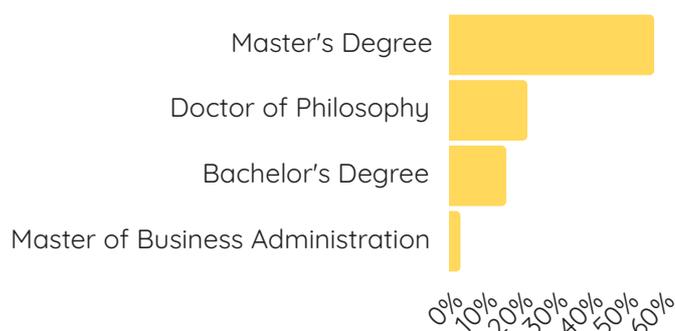
European Professionals

1. **Computer Science** - 5,300
2. **Computational Science** - 4,044
3. **Mathematics** - 1,840
4. **Artificial Intelligence** - 1,772
5. **Physics** - 1,518

US Professionals

1. **Computer Science** - 8,043
2. **Computational Science** - 6,823
3. **Electrical & Electronics Engineering** - 2,014
4. **Mathematics** - 1,647
5. **Data Science** - 1,495

Machine Learning
Top Employers

Which companies are employing talent in the UK?
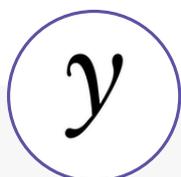
Kubrick Group
117 Professionals

Meta
81 Professionals

Deliveroo
47 Professionals

Apple
37 Professionals

Faculty
32 Professionals

GSK
27 Professionals

Snap Inc.
25 Professionals

Sky
17 Professionals

Which companies lead in hiring Machine Learning talent across Europe?

Apple
163 Professionals

Meta
128 Professionals

Kubrick Group
117 Professionals

Deliveroo
54 Professionals

Yandex
52 Professionals

Omdena
52 Professionals

Bosch
51 Professionals

Spotify
49 Professionals

Which companies stand out as major employers of top-tier talent in the USA?

Apple
924 Professionals

Meta
483 Professionals

Google
259 Professionals

Adobe
177 Professionals

TikTok
175 Professionals

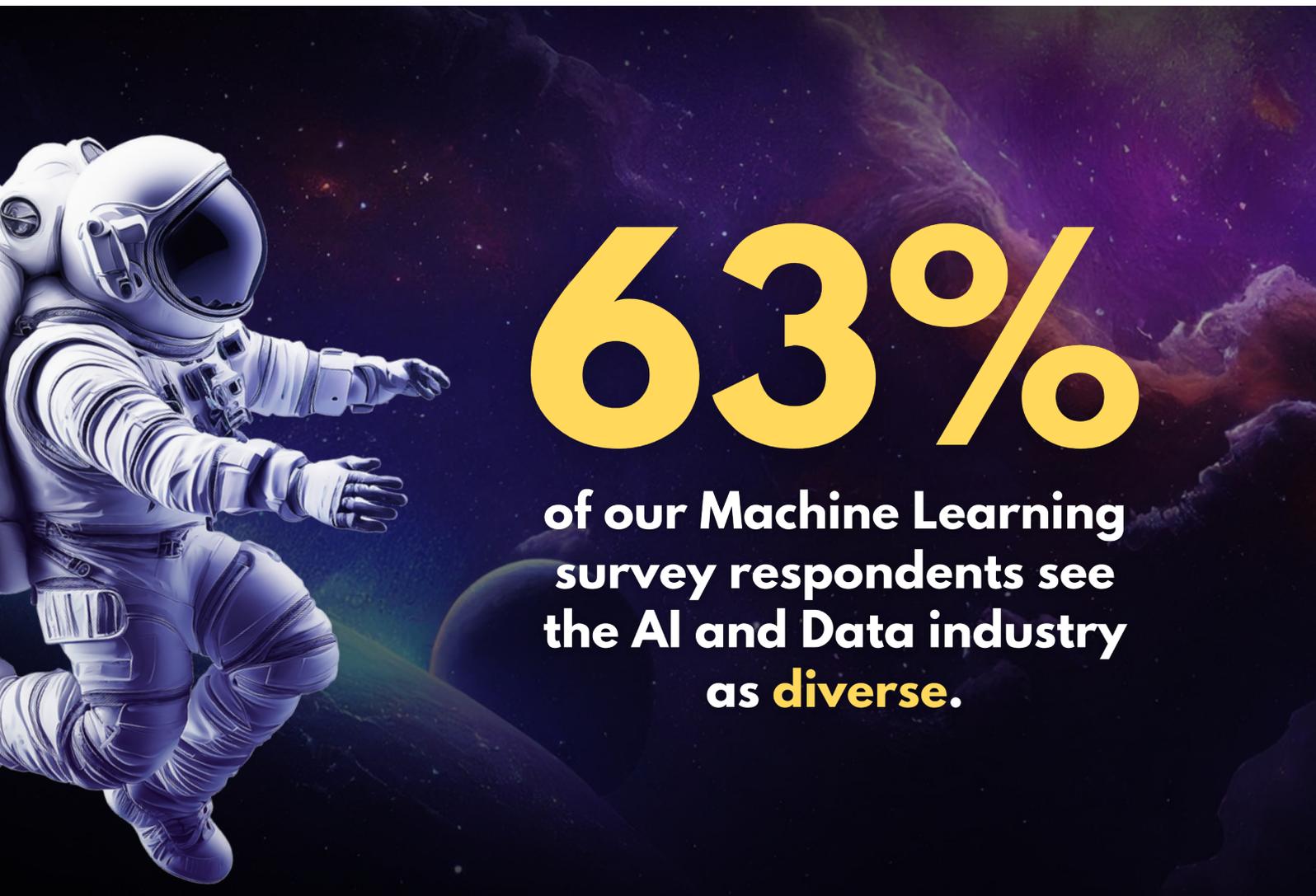**Capital One**
173 Professionals

Lockheed Martin
168 Professionals

Amazon
165 Professionals

63%
of our Machine Learning survey respondents see the AI and Data industry as **diverse**.

Machine Learning
Salary Guide

Average salaries for different roles/levels based on our placement data and survey results:

UK		
Machine Learning Engineer	Grad	£46,000
	Junior	£59,000
	Mid	£75,020
	Senior	£89,500
	Staff	£94,680
	Manager/Lead	£111,300
	Head Of	£131,003
Research Engineer	Junior	£63,400
	Mid	£78,500
	Senior/Staff	£93,200
	Head of Research	£122,300
Prompt Engineer	Junior	£48,000
	Mid	£65,200
	Staff/Senior	£81,000
Europe		
Machine Learning Engineer	Grad	€41,900
	Junior	€58,000
	Mid	€71,785
	Senior	€83,442
	Staff	€96,751
	Manager/Lead	€118,200
	Head Of	€134,322
Research Engineer	Junior	€51,238
	Mid	€81,400
	Senior/Staff	€101,222
	Head of Research	€133,200

Prompt Engineer	Junior	€56,000
	Mid	€69,120
	Staff/Senior	€93,009
USA		
Machine Learning Engineer	Grad	$92,538
	Junior	$117,875
	Mid	$130,800
	Senior	$159,800
	Staff	$182,390
	Manager/Lead	$201,500
	Head Of	$232,739
Research Engineer	Junior	$129,921
	Mid	$145,000
	Senior/Staff	$185,201
	Head of Research	$241,800
Prompt Engineer	Junior	$168,400
	Mid	$183,200
	Staff/Senior	$227,000

Do you feel that you are remunerated well or are you underpaid?

According to our recent survey, an astonishing **45% of professionals** in the field of Machine Learning express a sentiment of being **undervalued in terms of their compensation**.

Well: **17%**

Fairly: **38%**

Underpaid: **45%**
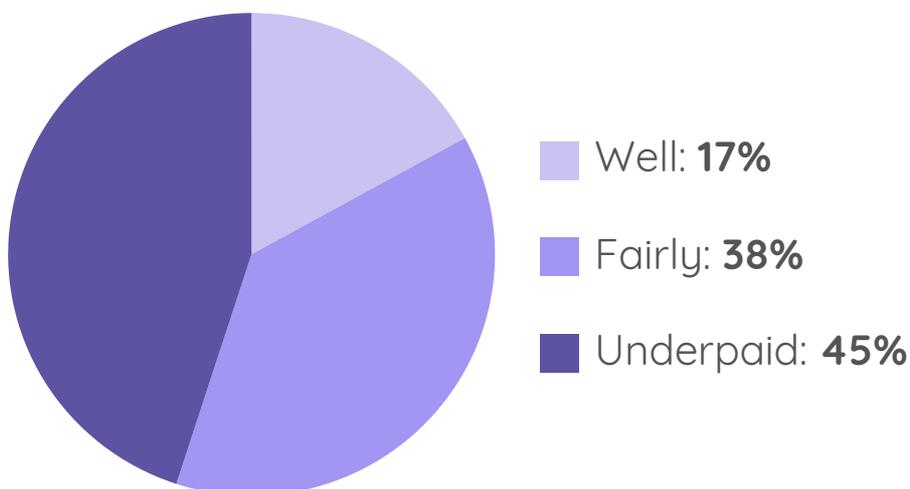
Data Science
Overview

United Kingdom:

14,222
Data Science Professionals in the UK talent pool on LinkedIn.

70% / 30%
The gender split in the industry, with males accounting for the majority of professionals in the UK.

1.3 Years
Is the median tenure of Data Science professionals in the UK before they are most likely to move into a new role.

Europe:

72,183
Data Science Professionals in the European talent pool on LinkedIn.

71% / 29%
The gender split in the industry, with males accounting for the majority of professionals in Europe.

1.3 Years
Is the median tenure of Data Science professionals in Europe before they are likely to move into a new role.

United States of America:

66,726
Data Science Professionals in the USA talent pool on LinkedIn.

67% / 33%
The gender split in the industry, with males accounting for the majority of professionals in the USA.

1.4 Years
Is the median tenure of Data Science professionals in the USA before they are likely to move into a new role.

Data Science
Location

Where is Data Science talent located?

London, Manchester, and Bristol have surfaced as the primary hubs for Data Science talent in the UK, as per insights from LinkedIn.

London
7,199 professionals

Manchester
597 professionals

Bristol
563 professionals

Edinburgh
389 professionals

Leeds
315 professionals

In Europe, **London takes the lead**, followed closely by Paris and the Netherlands.

London
7,199 professionals

Paris
5,349 professionals

Netherlands
3,793 professionals

Madrid
2,743 professionals

Berlin
2,138 professionals

In the US, the major player in Data Science are **San Francisco with 10,029** professionals on LinkedIn, followed by New York City, and Washington DC.
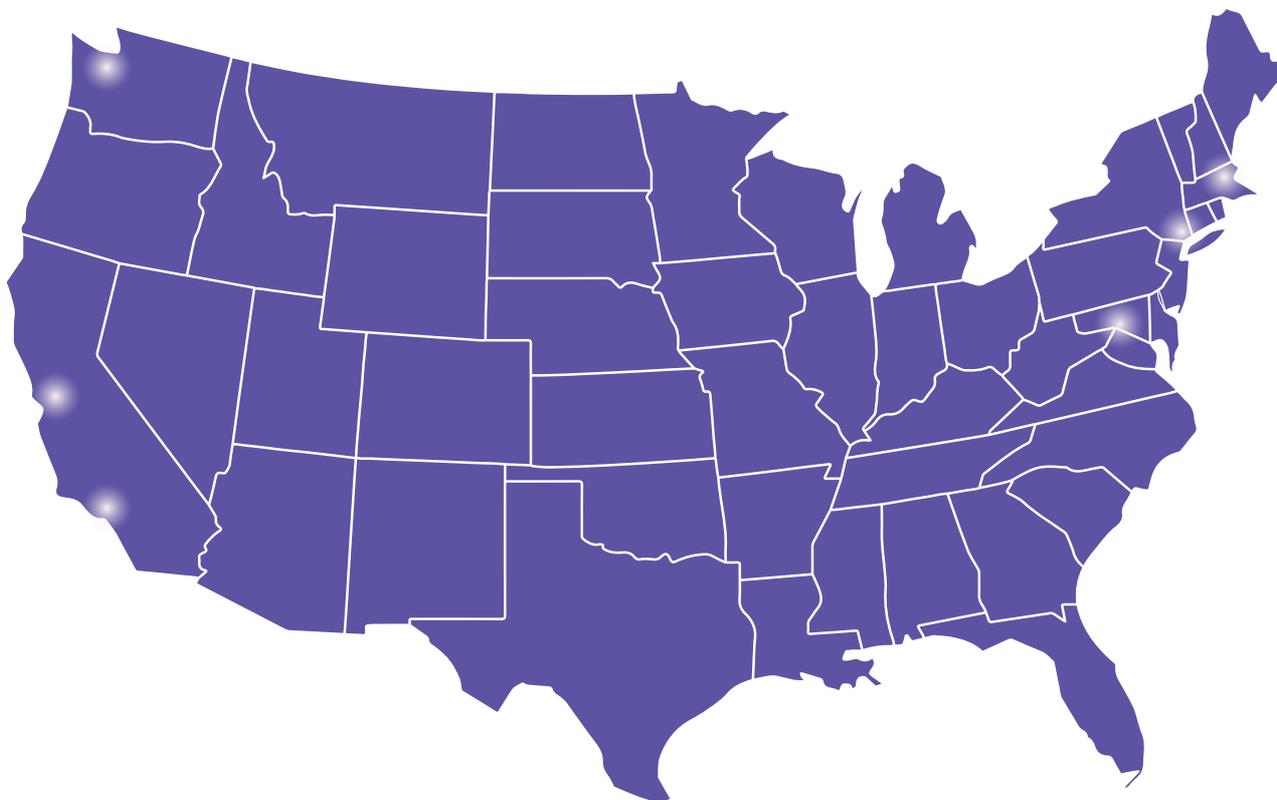
San Francisco
10,029 professionals

New York City
8,160 professionals

Washington DC
4,952 professionals

Greater Seattle
4,205 professionals

Greater Boston
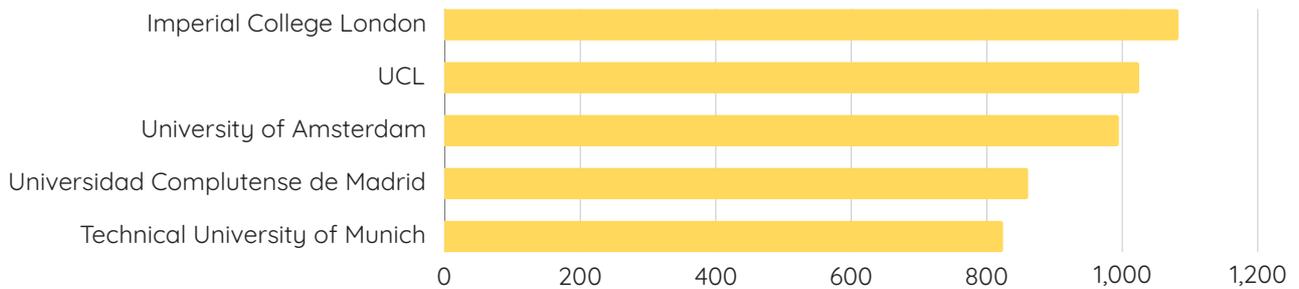3,431 professionals

Los Angeles
2,926 professionals

Data Science
Universities Producing Talent

This section delves into the diverse academic backgrounds that contribute to the fabric of data science excellence, exploring the universities attended by these professionals and shedding light on the educational journeys that shape their analytical prowess.
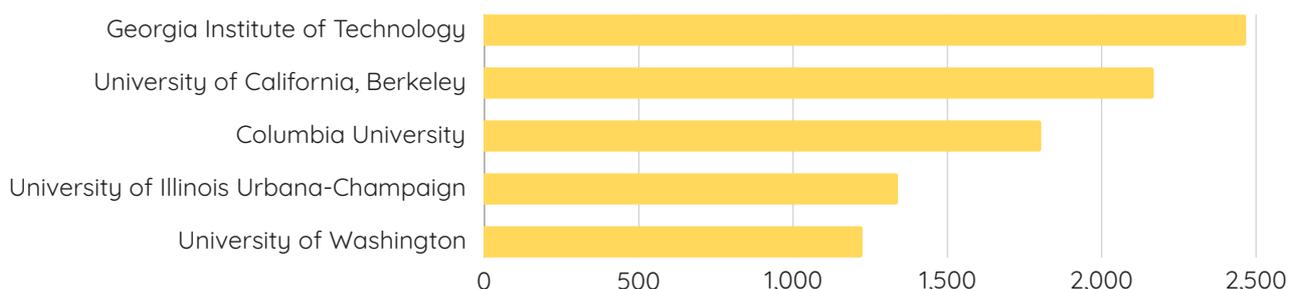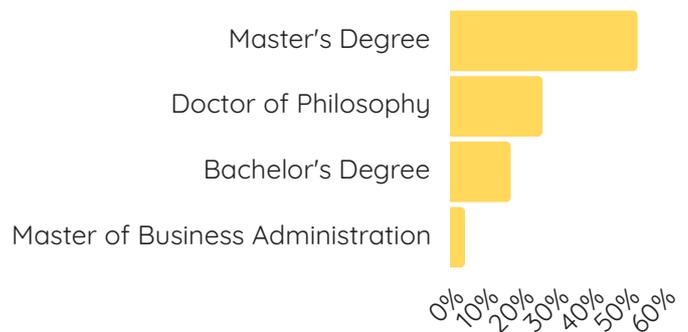
UK
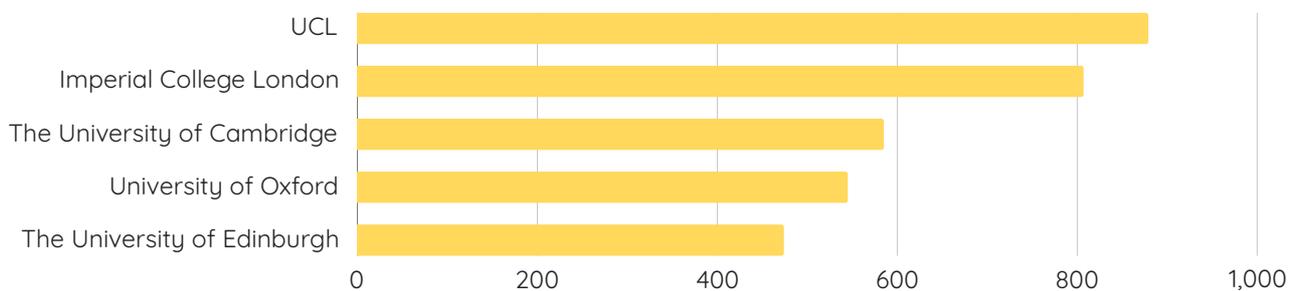
Europe

USA

Data Science
Degrees & Fields of Study

This section delves into the educational nuances, exploring the varied academic paths and disciplines pursued by these professionals. **Mathematics emerges as the predominant field of study among data science professionals in the UK and Europe**, while in the United States, Computer Science takes precedence.
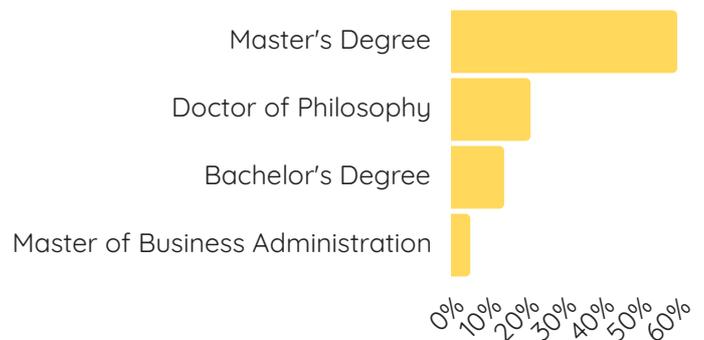
UK Professionals

1. **Mathematics** - 3,393
2. **Data Science** - 2,477
3. **Physics** - 2,451
4. **Computer Science** - 2,203
5. **Computational Science** - 1,724

Master's Degree
Doctor of Philosophy
Bachelor's Degree
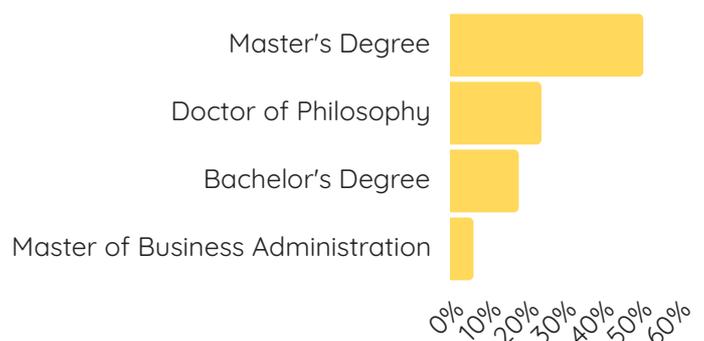Master of Business Administration

0% 10% 20% 30% 40% 50% 60%

European Professionals

1. **Mathematics** - 14,042
2. **Computer Science** - 12,178
3. **Data Science** - 11,433
4. **Physics** - 11,173
5. **Computational Science** - 8,482

Master's Degree
Doctor of Philosophy
Bachelor's Degree
Master of Business Administration

0% 10% 20% 30% 40% 50% 60%

US Professionals

1. **Computer Science** - 12,600
2. **Data Science** - 11,295
3. **Computational Science** - 10,457
4. **Mathematics** - 9,939
5. **Statistics** - 9,379

Master's Degree
Doctor of Philosophy
Bachelor's Degree
Master of Business Administration

0% 10% 20% 30% 40% 50% 60%

Data Science
Top Employers

Which companies are employing Data Science talent in the UK?

Lloyds Banking Group
183 Professionals

Meta
159 Professionals

Office for National Statistics
134 Professionals

NatWest Group
116 Professionals

Deliveroo
100 Professionals

Aviva
93 Professionals

Expedia Group
76 Professionals

Sky
72 Professionals

Which companies lead in hiring Data Science talent across Europe?

Accenture
302 Professionals

IBM
262 Professionals

Capgemini
220 Professionals

Meta
207 Professionals

BBVA
205 Professionals

Vodafone
203 Professionals

Roche
196 Professionals

Bayer
184 Professionals

Which companies stand out as major employers of top-tier talent in the USA?

Microsoft
1,269 Professionals

Meta
1,124 Professionals

Google
821 Professionals

Booz Allen Hamilton
805 Professionals

Amazon
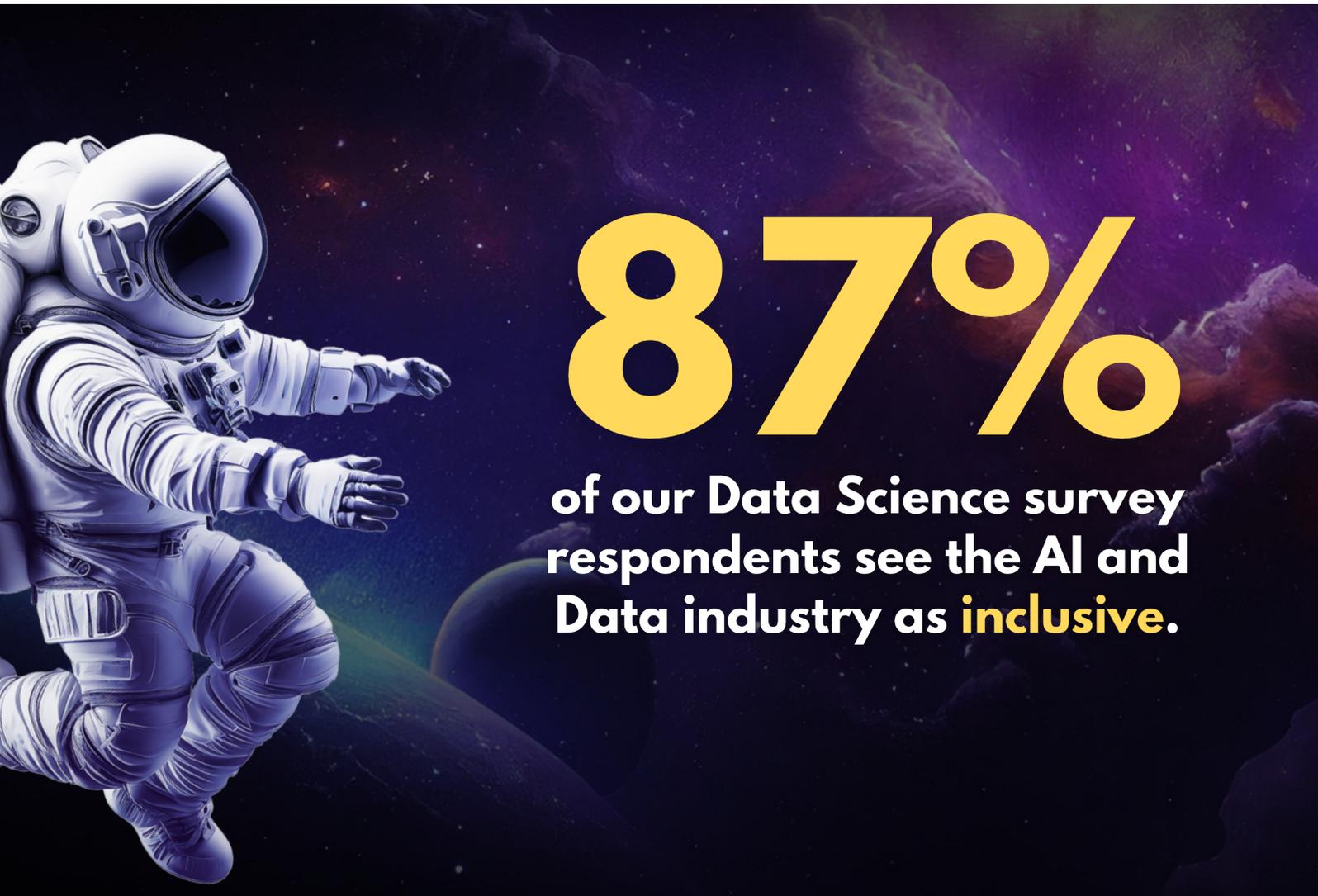797 Professionals

IBM
566 Professionals

Apple
485 Professionals

Walmart Global Tech
484 Professionals

87%

of our Data Science survey respondents see the AI and Data industry as inclusive.
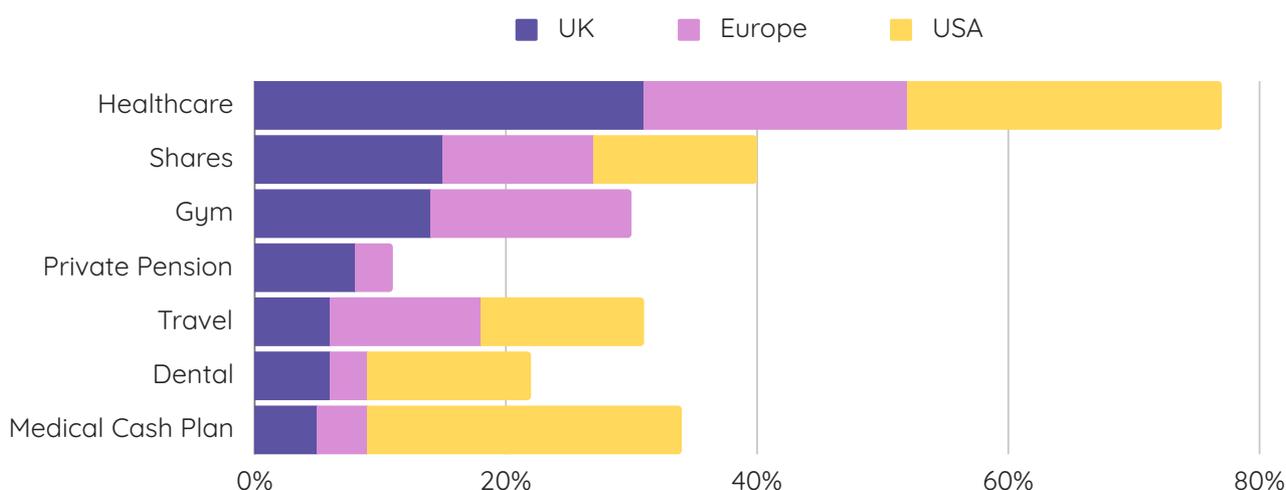
Data Science
Salary Guide

Average salaries for different roles/levels based on our placement data and survey results:

UK		
Data Scientist	Grad	£53,230
	Junior	£66,900
	Mid	£72,000
	Senior	£84,000
	Staff	£87,000
	Manager/Lead	£98,400
	Head Of	£132,000
Europe		
Data Scientist	Grad	€51,328
	Junior	€62,300
	Mid	€74,753
	Senior	€88,700
	Staff	€96,487
	Manager/Lead	€110,303
	Head Of	€128,500
USA		
Data Scientist	Grad	$102,300
	Junior	$136,499
	Mid	$162,100
	Senior	$183,400
	Staff	$202,000
	Manager/Lead	$213,400
	Head Of	$272,304

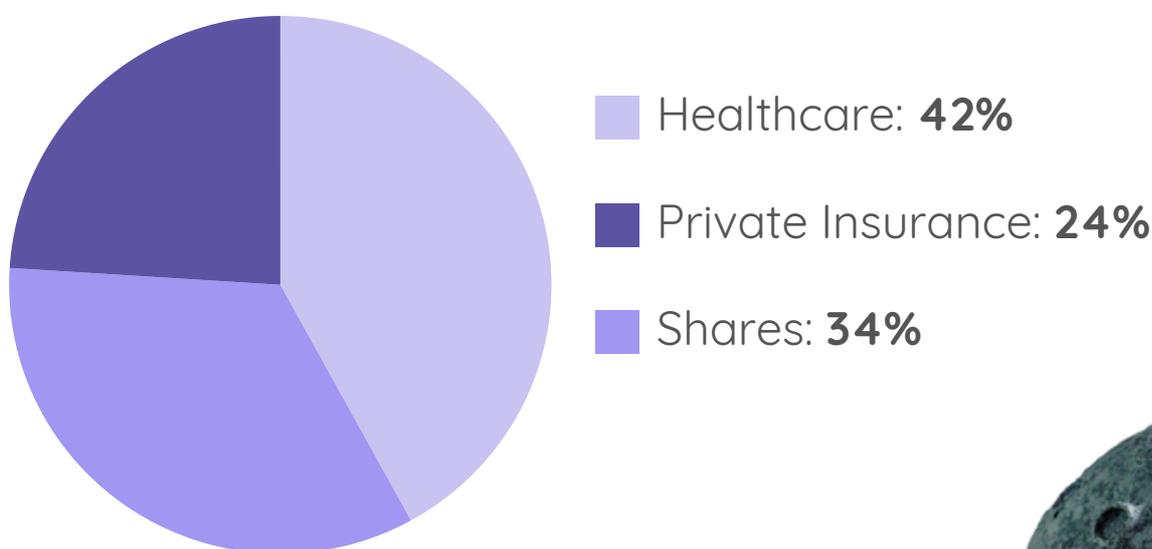# Machine Learning & Data Science Benefits

What benefits do Machine Learning & Data Science professionals typically get?

Here are the current benefits reported by machine learning and data science professionals based on our survey findings.


Legend: UK, Europe, USA

Categories (top to bottom): Healthcare, Shares, Gym, Private Pension, Travel, Dental, Medical Cash Plan

X-axis: 0%, 20%, 40%, 60%, 80%

Which 3 benefits do Machine Learning & Data Science professionals find most important?

The data below provides valuable insights into the top 3 benefits that machine learning and data science professionals prioritise across the UK, Europe, and the US.
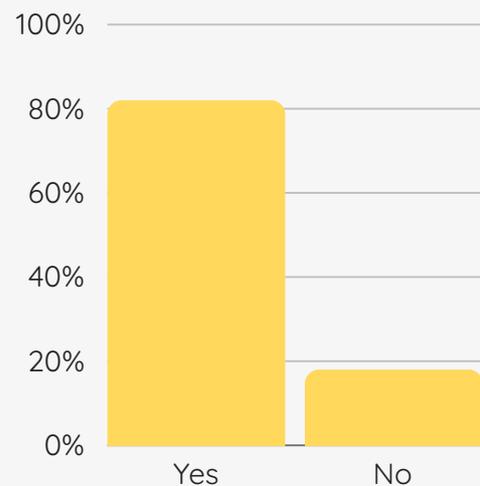

Healthcare: **42%**

Private Insurance: **24%**

Shares: **34%**

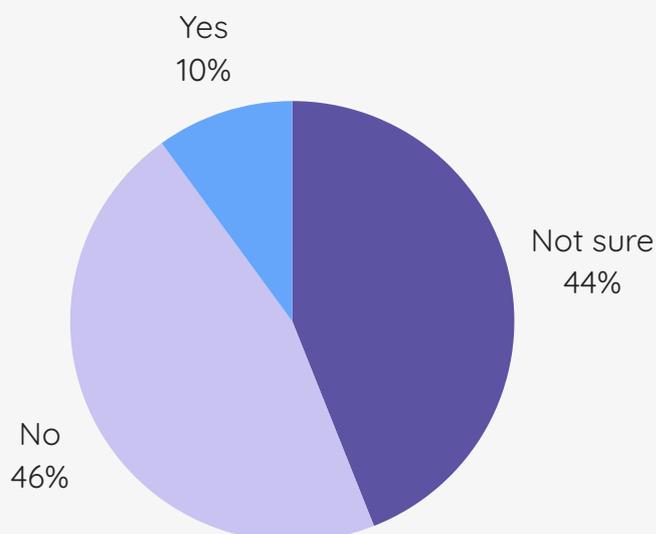# Machine Learning & Data Science
Hybrid Working

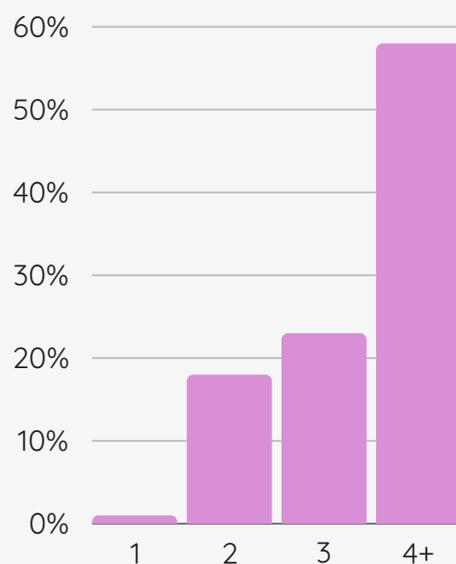### Are Machine Learning & Data Science professionals offered flexi-time?

No
26%

Yes
74%
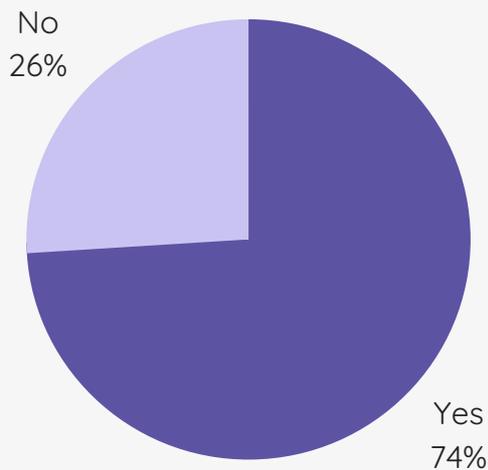
Are Machine Learning & Data Science professionals offered remote working?

100%
80%
60%
40%
20%
0%

Yes   No

Would they accept a job that DIDN'T offer remote working?

Yes
10%

Not sure
44%

No
46%

How many days are professionals allowed to work remotely?

60%
50%
40%
30%
20%
10%
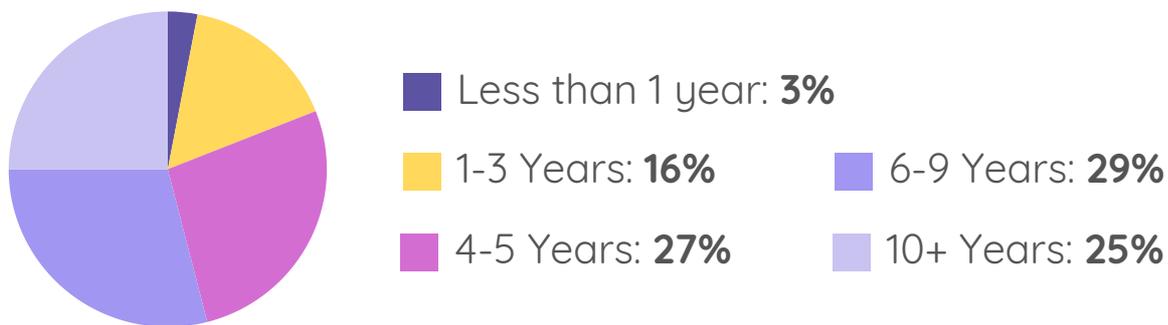0%

1   2   3   4+

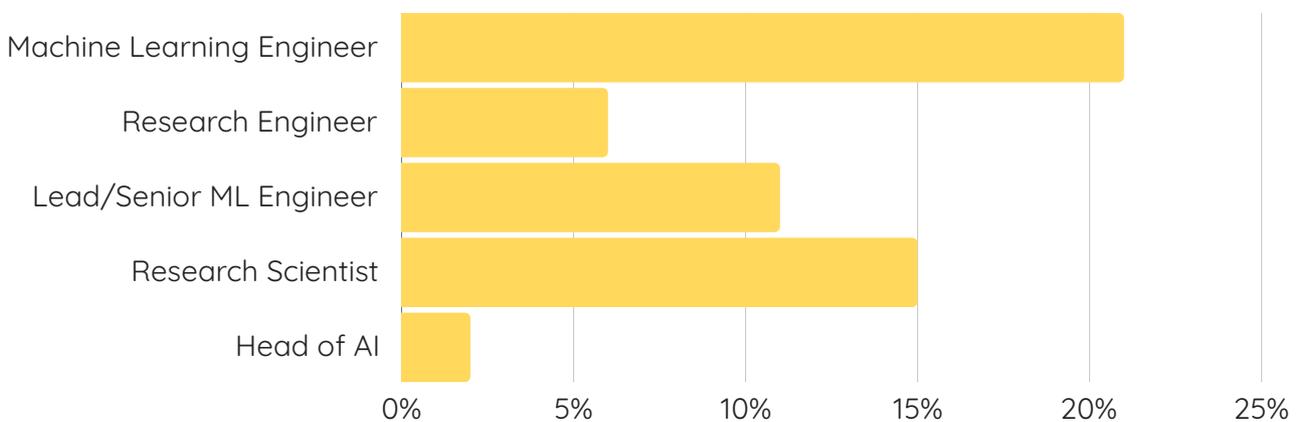# Machine Learning & Data Science
What else did they have to say?

We surveyed Machine Learning and Data Science experts to gain a deeper understanding of the field and to explore their predictions for the future. Here's what they said:
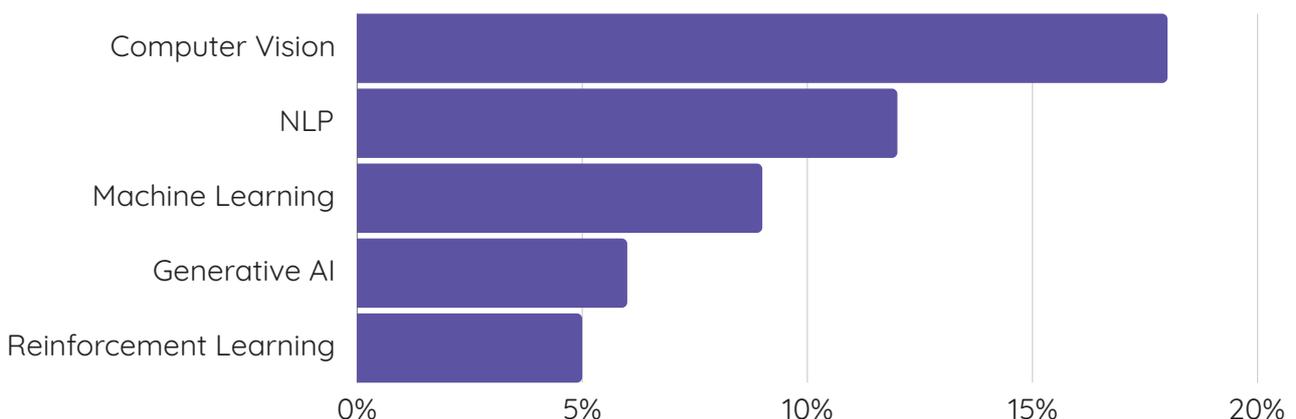
How many years of experience do you have?

- Less than 1 year: **3%**
- 1-3 Years: **16%**
- 4-5 Years: **27%**
- 6-9 Years: **29%**
- 10+ Years: **25%**

What is closest to your current job title?

Job Title	Percentage
Machine Learning Engineer	~21%
Research Engineer	~6%
Lead/Senior ML Engineer	~11%
Research Scientist	~15%
Head of AI	~2%

What is the most interesting area of AI and Big Data for you?

Area	Percentage
Computer Vision	~18%
NLP	~12%
Machine Learning	~9%
Generative AI	~6%
Reinforcement Learning	~5%

Data Engineering
## Overview

United Kingdom:

14,101

Professionals with the title 'Data Engineer' in the UK talent pool on LinkedIn.

78% / 22%

The gender split in the industry, with males accounting for the majority of professionals in the UK.

1.4 Years

Is the median tenure of Data Engineering professionals in the UK before they are likely to move into a new role.

Europe:

62,129

Professionals with the title 'Data Engineer' in the Europe talent pool on LinkedIn.

77% / 23%

The gender split in the industry, with males accounting for the majority of professionals in Europe.

1.3 Years

Is the median tenure of Data Engineering professionals in Europe before they are likely to move into a new role.

United States of America:

64,229

Professionals with the title 'Data Engineer' in the USA talent pool on LinkedIn.

70% / 30%

The gender split in the industry, with males accounting for the majority of professionals in the USA.

1.3 Years

Is the median tenure of Data Engineering professionals in the USA before they are likely to move into a new role.
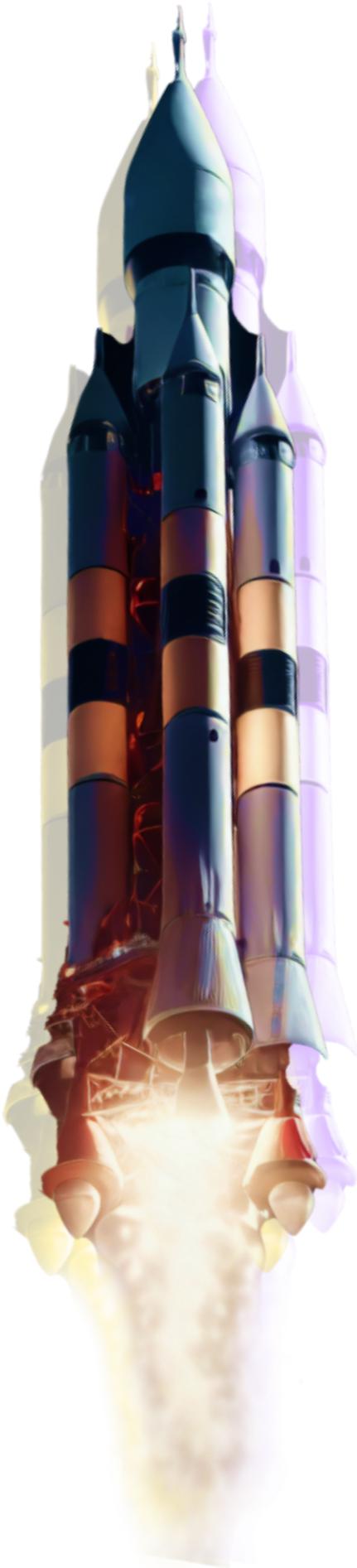
Data Engineering
Location

Where is Data Engineering talent located?

London stands as the primary UK hub for a significant concentration of Data Engineering talent.

London
6,118 professionals

Manchester
684 professionals

Bristol
556 professionals

Leeds
445 professionals

Edinburgh
396 professionals

London leads with 6,118 data engineering professionals, followed by Paris (4,818) and the Netherlands (3,291), showcasing the hierarchical distribution of expertise in Europe.

London
6,118 professionals

Paris
4,818 professionals

Netherlands
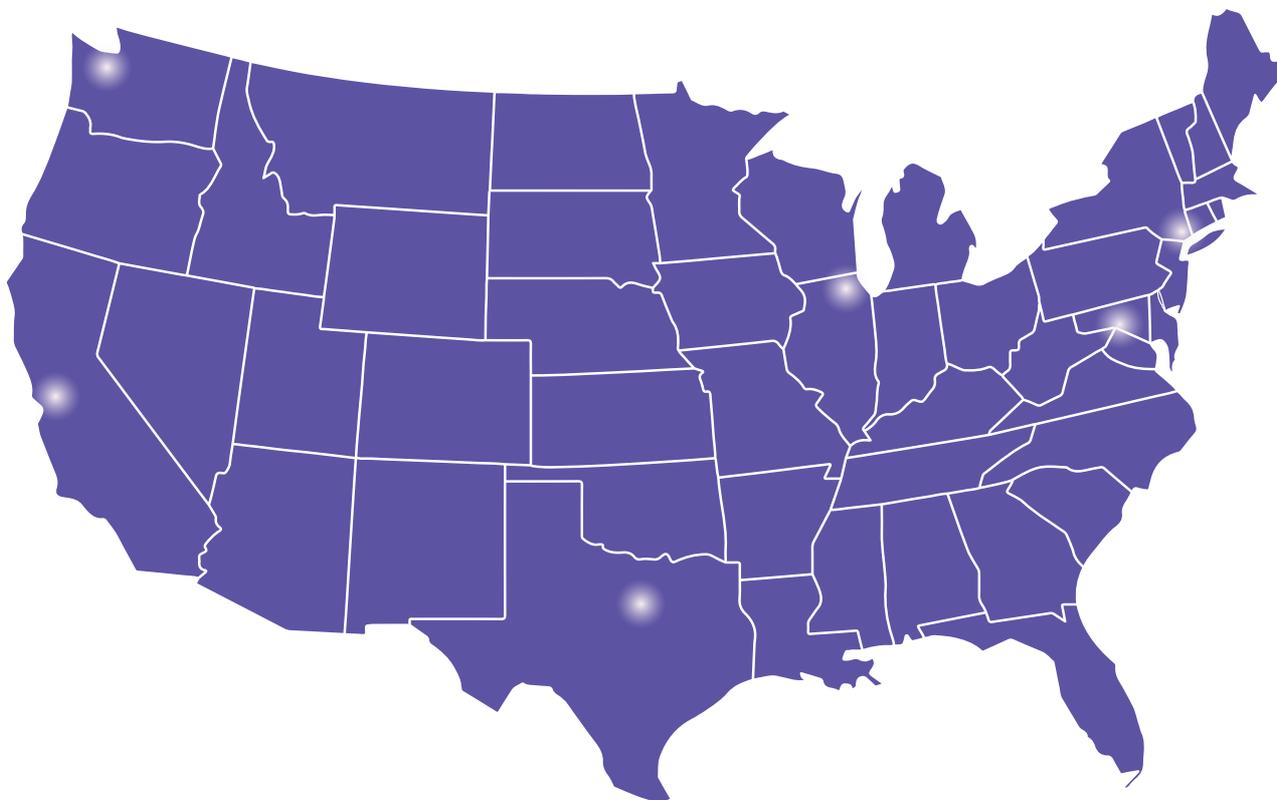3,291 professionals

Madrid
1,831 professionals

Berlin
1,723 professionals

In the United States, **New York City takes the lead in the ranking with 6,143 data engineers** according to LinkedIn, very closely followed by Dallas and San Francisco.
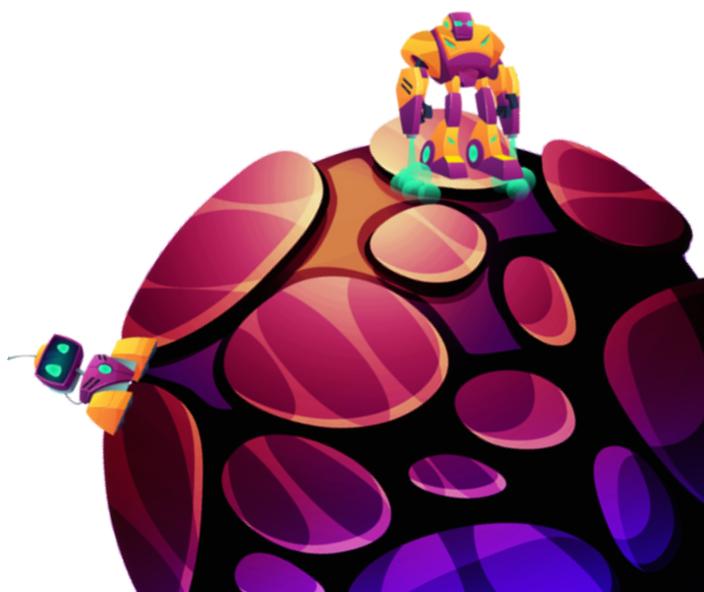
New York City
6,143 professionals

Dallas
6,025 professionals

San Francisco
5,441 professionals

Seattle
3,211 professionals
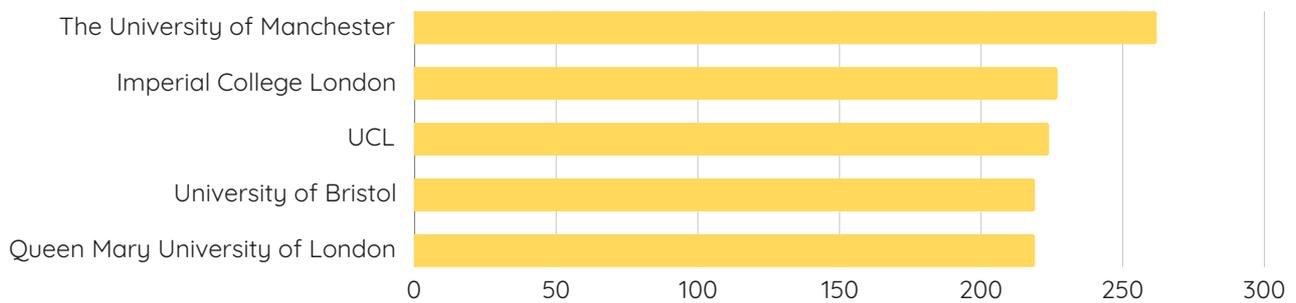
Washington DC
2,975 professionals
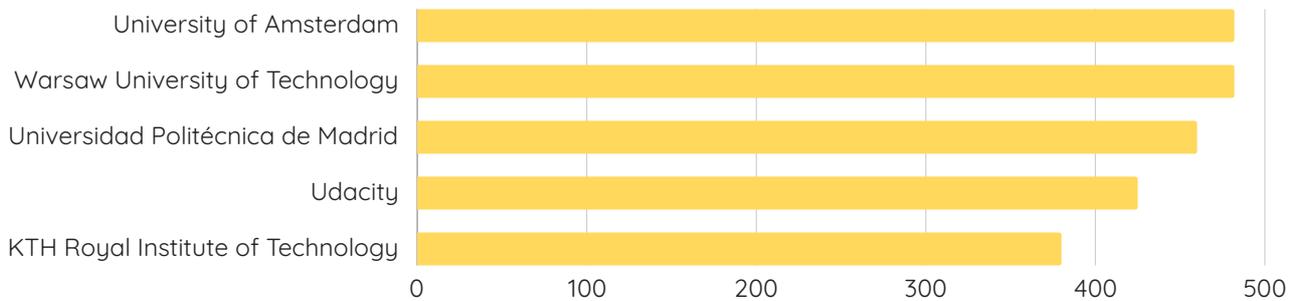
Chicago
2,737 professionals

Data Engineering
Universities Producing Talent

Within this section, we delve into the educational backgrounds of data engineering professionals across the UK, Europe, and the US. Our focus is on spotlighting the varied institutions that have played a crucial role in shaping and refining their expertise.
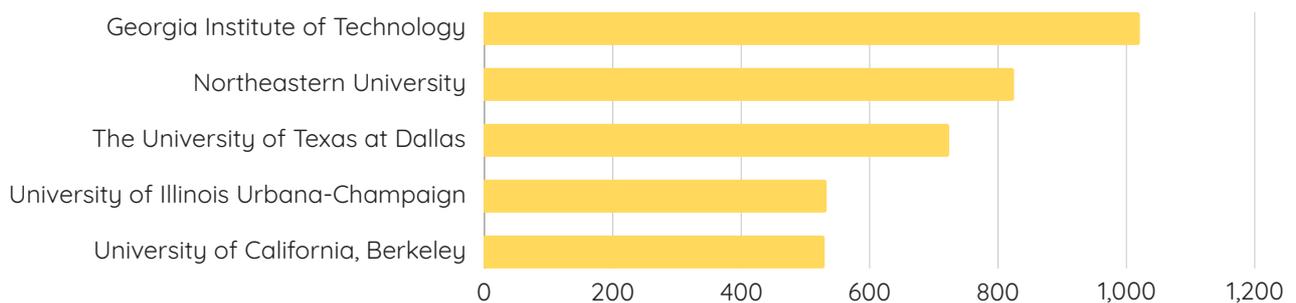
UK

University	
The University of Manchester	
Imperial College London	
UCL	
University of Bristol	
Queen Mary University of London	

(x-axis: 0, 50, 100, 150, 200, 250, 300)

Europe

University	
University of Amsterdam	
Warsaw University of Technology	
Universidad Politécnica de Madrid	
Udacity	
KTH Royal Institute of Technology	

(x-axis: 0, 100, 200, 300, 400, 500)

USA

University	
Georgia Institute of Technology	
Northeastern University	
The University of Texas at Dallas	
University of Illinois Urbana-Champaign	
University of California, Berkeley	

(x-axis: 0, 200, 400, 600, 800, 1,000, 1,200)

Data Engineering
Degrees & Fields of Study

In this section, we take a closer look at the unique educational journeys of data engineering pros, uncovering the diverse paths that have shaped their expertise.
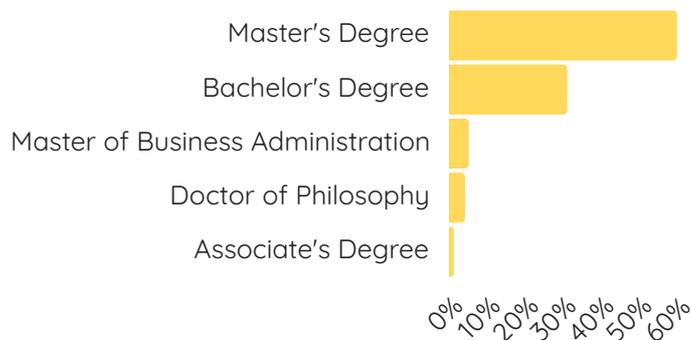
UK Professionals

1. **Computer Science** - 2,659
2. **Computational Science** - 2,259
3. **Mathematics** - 1,671
4. **Physics** - 1,062
5. **Information Technology** - 983
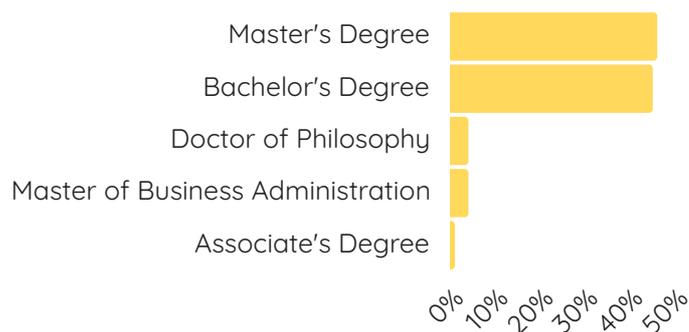
European Professionals

1. **Computer Science** - 12,394
2. **Computational Science** - 8,776
3. **Computer & Information Sciences & Support Services** - 6,429
4. **Information Technology** - 5,470
5. **Data Science** - 4,652

US Professionals

1. **Computer Science** - 20,031
2. **Computational Science** - 18,073
3. **Information Technology** - 6,510
4. **Data Science** - 4,102
5. **Mathematics** - 3,185
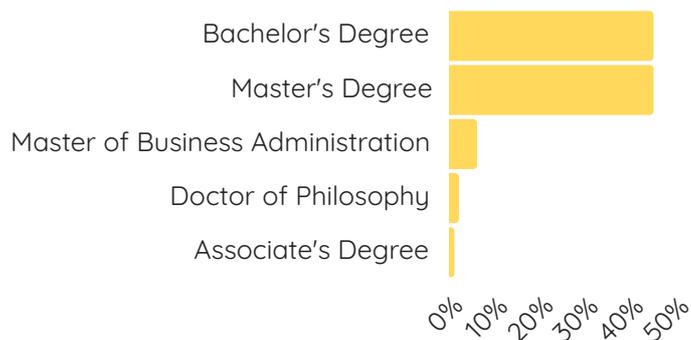
Data Engineering
Top Employers

Which companies are employing talent in the UK?

Kubrick Group
297 Professionals

Lloyds Banking
156 Professionals

Sky
155 Professionals

Tata Consultancy Services
147 Professionals

NatWest Group
136 Professionals

Capgemini
92 Professionals

JLR
85 Professionals

BT Group
81 Professionals

Which companies lead in hiring Data Engineering talent across Europe?

Capgemini
576 Professionals

Accenture
325 Professionals

Kubrick Group
298 Professionals

Tata Consultancy Services
258 Professionals

EPAM Systems
221 Professionals

IBM
216 Professionals

Sopra Steria
168 Professionals

Solita
166 Professionals

Which companies stand out as major employers of top-tier talent in the USA?

Amazon
949 Professionals

Meta
707 Professionals

Capital One
423 Professionals

USAA
358 Professionals

Optum
342 Professionals

Amazon (AWS)
328 Professionals

Apple
316 Professionals

CVS Health
311 Professionals

67%

of Data Engineering survey respondents **would not** accept a role that didn't offer remote working.
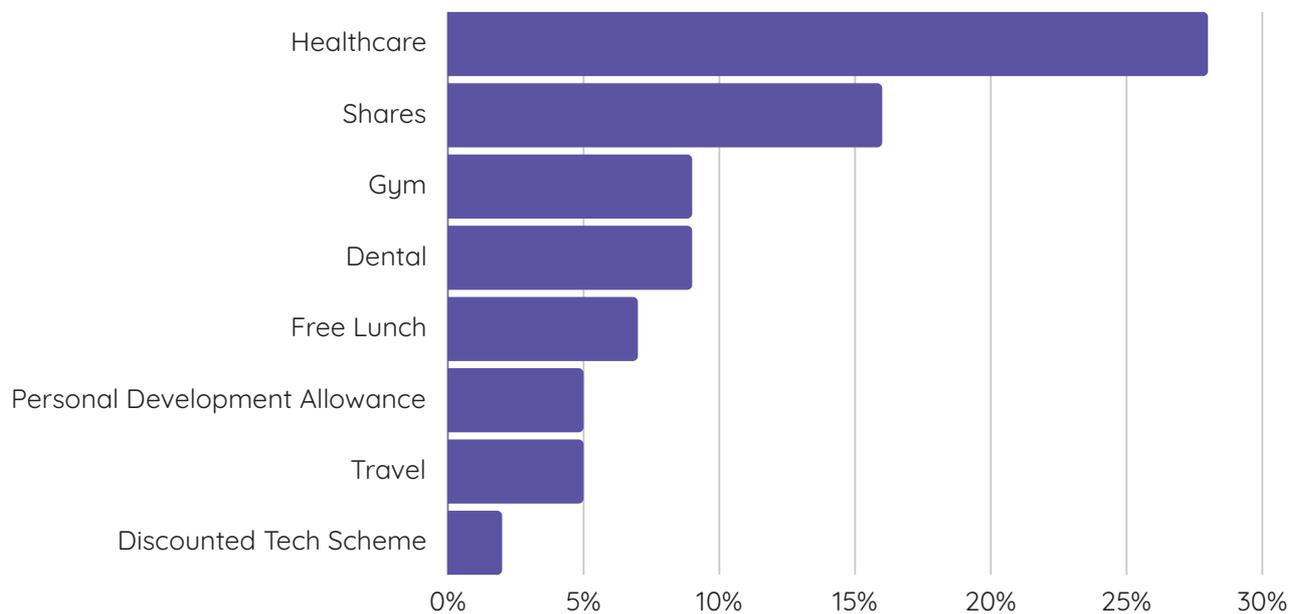
Data Engineering
Salary Guide

Average salaries for different roles/levels based on our placement data and survey results:

| UK		
Data Engineer	Grad	£41,250
	Junior	£52,300
	Mid	£63,600
	Senior	£79,240
	Staff	£98,780
	Manager/Lead	£115,700
	Head of	£146,000
Europe		
Data Engineer	Grad	€38,560
	Junior	€47,500
	Mid	€59,870
	Senior	€69,800
	Staff	€88,780
	Manager/Lead	€97,600
USA		
Data Engineer	Grad	$105,927
	Junior	$144,790
	Mid	$166,000
	Senior	$190,600
	Staff	$198,870
	Manager/Lead	$212,330
	Head of	$272,304

Data Engineering
Benefits

What benefits do Data Engineering professionals typically get?

Our survey highlights the primary concerns of data engineering professionals, with healthcare benefits and shares standing out as key priorities.


Which 3 benefits do Data Engineering professionals find most important?

Remote/hybrid working emerged as the top priority for data engineering professionals, with 64% expressing its utmost importance among benefits.
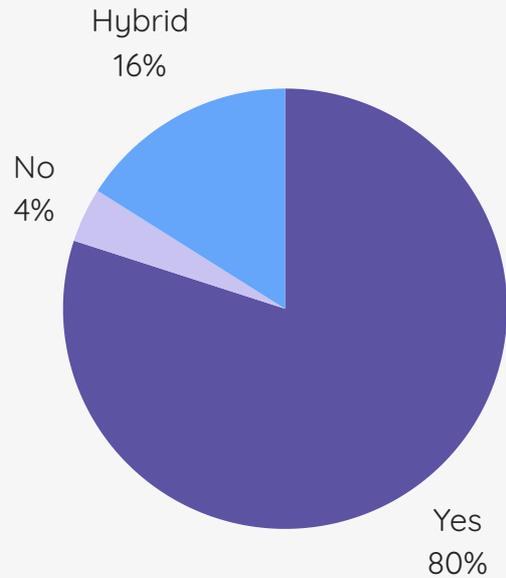

Remote/Hybrid Work: **64%**
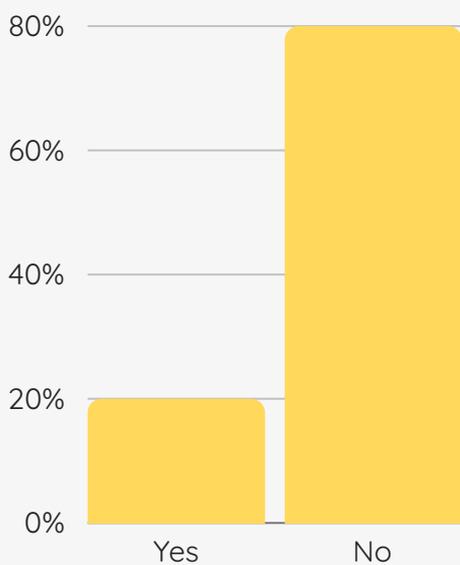
Work Life Balance: **14%**

Healthcare: **22%**
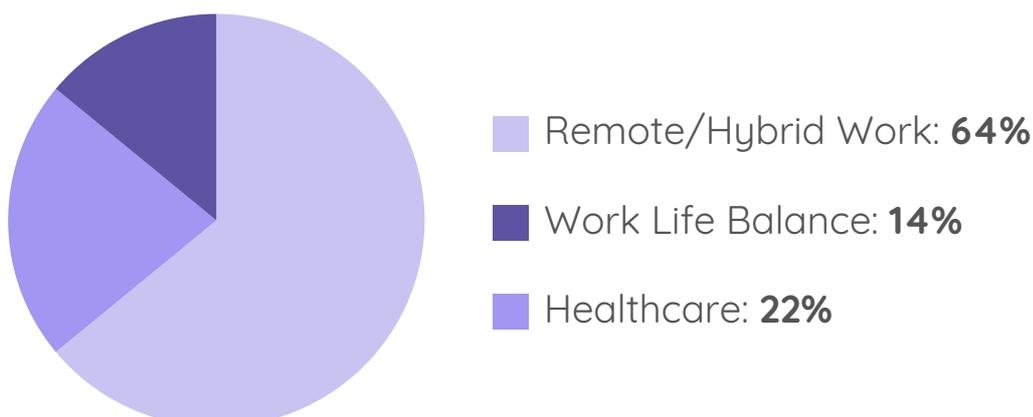
Data Engineering
Hybrid Working

Are Data Engineering professionals offered flexi-time?

No
20%

Yes
80%

Are Data Engineering professionals offered remote work?

Hybrid
16%

No
4%

Yes
80%
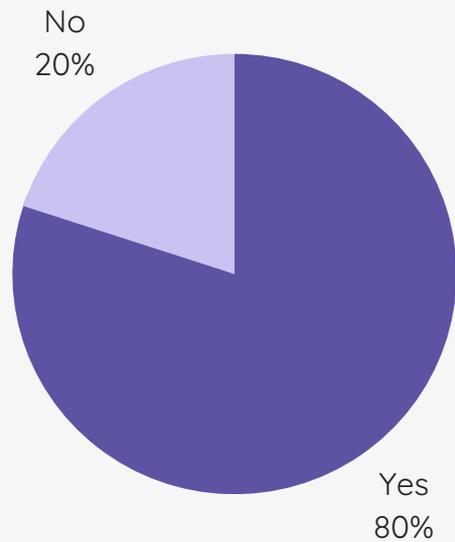
Are they required to be fully on-site?

80%

60%

40%

20%

0%

Yes   No

Is remote working essential for them when considering a job?

70%

60%
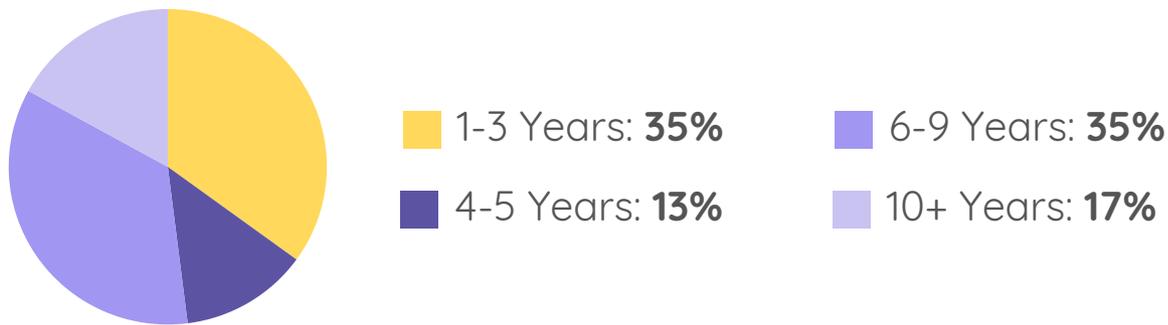
50%

40%

30%

20%

10%

0%

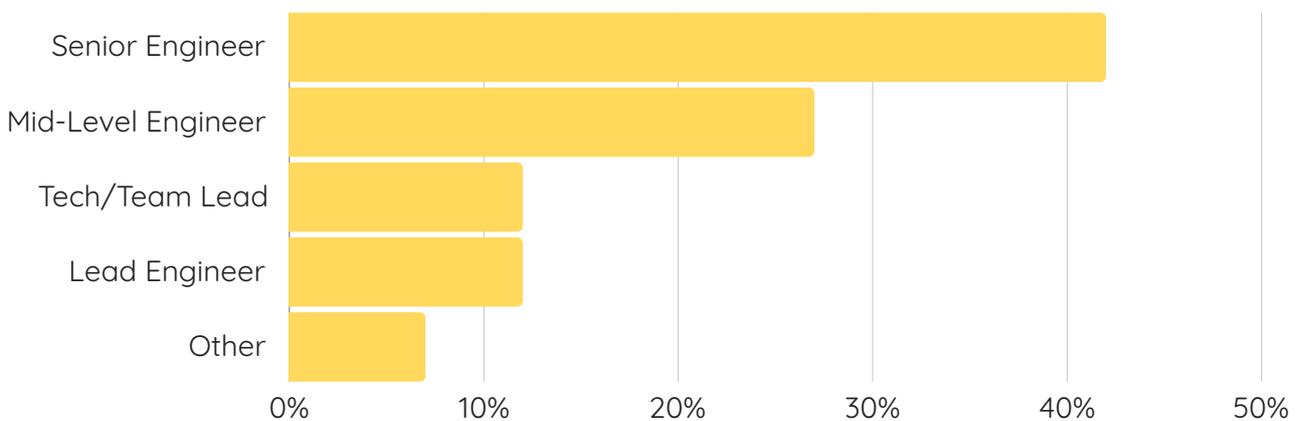Yes   No
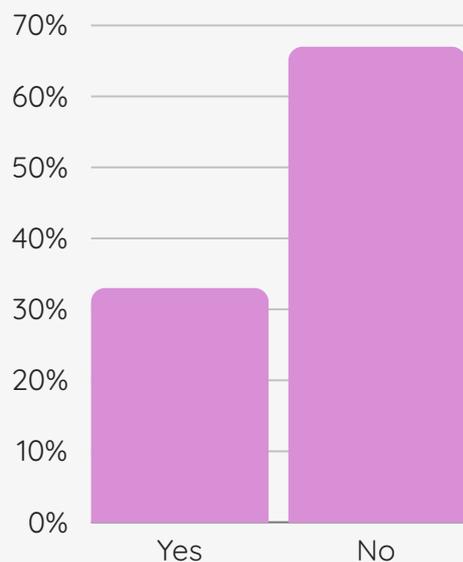
Data Engineering
What else did they have to say?

We surveyed Data Engineering experts to gain a deeper understanding of the field and to explore their predictions for the future.
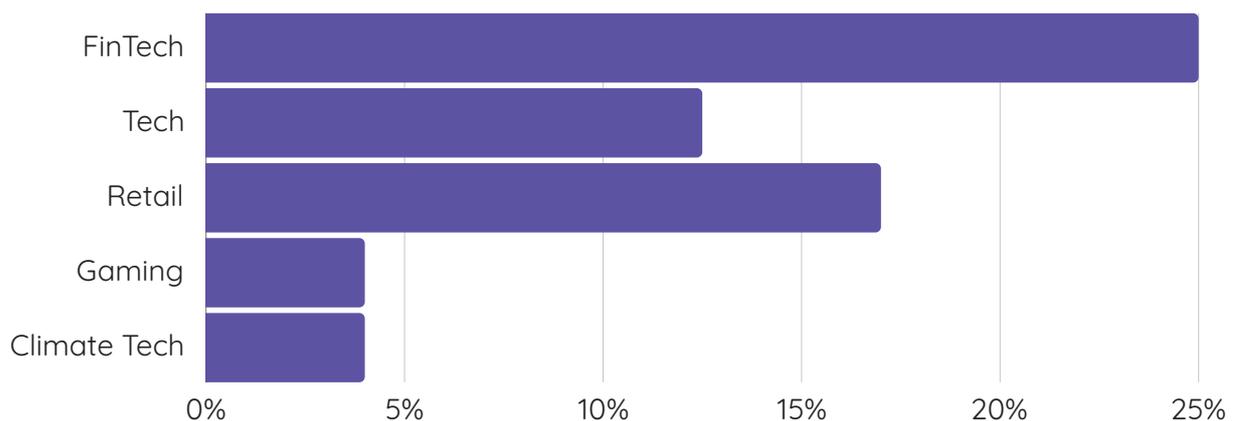
How many years of experience do you have?

- 1-3 Years: **35%**
- 4-5 Years: **13%**
- 6-9 Years: **35%**
- 10+ Years: **17%**

What is closest to your current job title?

Title	
Senior Engineer	~42%
Mid-Level Engineer	~27%
Tech/Team Lead	~12%
Lead Engineer	~12%
Other	~7%

What is the most interesting industry for you?

Industry	
FinTech	~25%
Tech	~12%
Retail	~17%
Gaming	~4%
Climate Tech	~4%

Let's stay in touch!

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Winner of the 'Outstanding Advocate for Women In Tech' Award!

understanding
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