

Data Science Survey

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Page exit logic: Skip / Disqualify Logic**IF:** #2 Question "For you, data analysis is...?" is one of the following answers ("I'm not involved in data analysis") **THEN:** Jump to **Page 6**

Logic: Show/hide trigger exists.

1) For you, data analysis is...?*

- ☐ Your primary professional activity
 - ☐ A secondary/additional activity that you perform as part of your job
 - ☐ A hobby
 - ☐ Other – Write In: _____ *
 - ☐ I'm not involved in data analysis
-

Page 2

Page exit logic: Skip / Disqualify Logic**IF:** #8 Question "What programming language(s) do you regularly use for data analysis, if any?" is one of the following answers ("None") **THEN:** Jump to **Page 4**

Logic: Hidden unless: #2 Question "For you, data analysis is...?" is one of the following answers ("Your primary professional activity", "A secondary/additional activity that you perform as part of your job")

2) Which of the following are you involved in?*

☐ Data processing

☐ Basic statistics

☐ Model design (research)

☐ Model design (routine computations)

☐ Model deployment in production mode

☐ Data visualization

☐ Other – Write In:: _____ *

Logic: Hidden unless: #2 Question "For you, data analysis is...?" is one of the following answers ("A hobby","Other – Write In:")

3) Which of the following are area(s) of interest to you?*

☐ Data processing

☐ Basic statistics

☐ Model design (research)

☐ Model design (routine computations)

☐ Model deployment in production mode

☐ Data visualization

☐ Other – Write In:: _____ *

4) Do you work with Big Data?*

☐ Yes

☐ No

☐ I'm not sure

5) Which tool(s) do you use for data analysis, if any?*

☐ None

☐ RapidMiner

- ☐ KNIME
- ☐ Alteryx
- ☐ Angoss
- ☐ Microsoft Azure ML
- ☐ Dataiku
- ☐ Domino Data Lab
- ☐ Alpine Data Chorus
- ☐ Other – Write In:: _____*

6) What deep learning libraries do you use, if any?*

- ☐ None
- ☐ TensorFlow
- ☐ Theano
- ☐ Torch
- ☐ Keras
- ☐ Other – Write In:: _____*

Logic: Show/hide trigger exists.

7) What programming language(s) do you regularly use for data analysis, if any?*

- ☐ None
- ☐ R
- ☐ Python
- ☐ Java
- ☐ Scala
- ☐ Lua
- ☐ Julia
- ☐ Matlab/Octave
- ☐ Other – Write In:: _____*

8) Which of the following tool(s) do you use, if any? *

☐ None

☐ Apache Spark

☐ Apache Samza

☐ Apache Flink

☐ Apache Hadoop/MapReduce

☐ Apache Hive

☐ Apache Pig

☐ Apache Tez

☐ Apache Beam

☐ Dask

☐ Other – Write In: _____ *

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Logic: Hidden unless: ((((((#8 Question "What programming language(s) do you regularly use for data analysis, if any?" is not exactly equal to ("R")) AND #8 Question "What programming language(s) do you regularly use for data analysis, if any?" is not exactly equal to ("Python")) AND #8 Question "What programming language(s) do you regularly use for data analysis, if any?" is not exactly equal to ("Java")) AND #8 Question "What programming language(s) do you regularly use for data analysis, if any?" is not exactly equal to ("Scala")) AND #8 Question "What programming language(s) do you regularly use for data analysis, if any?" is not exactly equal to ("Lua")) AND #8 Question "What programming language(s) do you regularly use for data analysis, if any?" is not exactly equal to ("Julia")) AND #8 Question "What programming language(s) do you regularly use for data analysis, if any?" is not exactly equal to ("Matlab/Octave")) AND #8 Question "What programming language(s) do you regularly use for data analysis, if any?" is not exactly equal to ("Other – Write In:"))

Piping: Piped Values From Question 8. (What programming language(s) do you regularly use for data analysis, if any?)

9) What is your main programming language for data analysis?*

10) Do you plan to adopt / migrate to other language(s) in the next 12 months?*

☐ None

☐ R

☐ Python

☐ Java

☐ Scala

☐ Lua

☐ Julia

☐ Matlab/Octave

☐ Kotlin

☐ Go

☐ Rust

☐ C++

☐ Other - Write In: _____ *

11) In your opinion, what programming language will be most used for data analysis in the next 5 years?*

☐ None

☐ R

☐ Python

☐ Java

☐ Scala

☐ Lua

☐ Julia

☐ Matlab/Octave

☐ Kotlin

☐ Go

☐ Rust

☐ C++

☐ Other – Write In:: _____ *

Logic: Hidden unless: #8 Question "What programming language(s) do you regularly use for data analysis, if any?" is one of the following answers ("Python")

12) What data analysis and/or data visualization libraries do you use with Python, if any?*

- ☐ None
- ☐ xgboost
- ☐ StatsModels
- ☐ NLTK
- ☐ scikit-learn
- ☐ Plotly
- ☐ Bokeh
- ☐ Matplotlib
- ☐ pandas
- ☐ NumPy
- ☐ SciPy
- ☐ gensim
- ☐ seaborn
- ☐ PySpark
- ☐ Other – Write In:: _____*

Logic: Hidden unless: #8 Question "What programming language(s) do you regularly use for data analysis, if any?" is one of the following answers ("R")

13) What data analysis and/or data visualization libraries do you use with R, if any?*

- ☐ None
- ☐ e1071
- ☐ rpart
- ☐ igraph
- ☐ nnet
- ☐ randomForest
- ☐ caret
- ☐ kernlab

- ☐ glmnet
- ☐ ROCR
- ☐ gbm
- ☐ party
- ☐ arules
- ☐ XGBoost
- ☐ ggplot2
- ☐ data.table
- ☐ plotly
- ☐ dplyr
- ☐ SparkR
- ☐ Other – Write In: _____ *

Logic: Hidden unless: #8 Question "What programming language(s) do you regularly use for data analysis, if any?" is one of the following answers ("R","Python","Java","Scala","Lua","Julia","Matlab/Octave","Other – Write In:")

14) What software development tool(s) do you use for data analysis?*

- ☐ Jupyter/IPython notebook
- ☐ JupyterLab
- ☐ Zeppelin
- ☐ Spyder IDE
- ☐ Rodeo
- ☐ RStudio
- ☐ Visual Studio
- ☐ Visual Studio Code
- ☐ PyCharm
- ☐ IntelliJ IDEA
- ☐ Eclipse
- ☐ Atom
- ☐ Sublime
- ☐ Vim

☐ Colaboratory

☐ Google Cloud Datalab

☐ Other - Write In: _____ *

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Logic: Hidden unless: #8 Question "What programming language(s) do you regularly use for data analysis, if any?" is exactly equal to ("None")

15) Are you planning on adopting any other language(s) in the next 12 months?*

☐ None

☐ R

☐ Python

☐ Java

☐ Scala

☐ Lua

☐ Julia

☐ Matlab/Octave

☐ Kotlin

☐ Go

☐ Rust

☐ C++

☐ Other - Write In: _____ *

16) Which statistics package(s) do you use to analyze and visualize data, if any?*

☐ None

☐ Statistica

☐ SPSS

- ☐ Spreadsheet editor (Microsoft Excel, OpenOffice Calc, Google Sheets, etc.)
- ☐ Stata
- ☐ SAS
- ☐ Tableau
- ☐ Other – Write In:: _____ *

17) What type(s) of data processing do you perform?*

- ☐ None
- ☐ Streaming/Real-Time
- ☐ Batch
- ☐ Other – Write In:: _____ *

Logic: Show/hide trigger exists.

18) What is the industry you primarily analyze data for?

- ☐ IT
- ☐ A non-IT industry

Logic: Hidden unless: #29 Question "What is the industry you primarily analyze data for?" is one of the following answers ("IT")

19) Which field(s) of IT do you primarily analyze data for?*

- ☐ Big Data / Data analysis
- ☐ Bioinformatics
- ☐ BPO services
- ☐ Cloud computing / platform
- ☐ Cybersecurity
- ☐ Data centers services
- ☐ E-learning
- ☐ FinTech

- ☐ Game development (including mobile games)
- ☐ Hardware
- ☐ Healthcare IT
- ☐ Internet / Search engines
- ☐ IoT / embedded
- ☐ IT services
- ☐ Mobile development
- ☐ Semiconductors
- ☐ Software development tools
- ☐ Telecom
- ☐ Other - Write In:: _____*

Logic: Hidden unless: #29 Question "What is the industry you primarily analyze data for?" is one of the following answers ("A non-IT industry")

20) Which industry or industries do you primarily analyze data for?*

- ☐ Accounting / Finance / Insurance
- ☐ Administration / Management / Business Development
- ☐ Banking / Real Estate / Mortgage Financing
- ☐ Bioinformatics
- ☐ Business / Strategic Management
- ☐ Construction / Architecture
- ☐ Customer Support
- ☐ Design
- ☐ Education / Training
- ☐ Entertainment / Mass media and information / Publishing
- ☐ Human Resources
- ☐ Law
- ☐ Logistics/ Transportation
- ☐ Machinery
- ☐ Manufacturing
- ☐ Marketing

- ☐ Medicine / Health
 - ☐ Non-profit
 - ☐ Restaurants / Hospitality / Tourism
 - ☐ Sales / Distribution / Retail
 - ☐ Science
 - ☐ Security
 - ☐ Service / Maintenance
 - ☐ Other - Write In:: _____ *
-

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21) What operating system(s) do you use as your work environment for data analysis?*

- ☐ Linux
- ☐ Mac OS
- ☐ Windows
- ☐ Other – Write In:: _____ *

Logic: Show/hide trigger exists.

22) What do you use to perform computations?*

- ☐ Local machine
- ☐ Cluster with 4 to 10 nodes
- ☐ Cluster with 11 to 50 nodes
- ☐ Cluster with more than 51 nodes
- ☐ Cloud service
- ☐ Other – Write In:: _____ *

Logic: Hidden unless: #33 Question "What do you use to perform computations?" is one of the following answers ("Cloud service")

23) What cloud service(s) do you use for data analysis?*

☐ Amazon Web Services (AWS)

☐ Microsoft Azure

☐ Google Cloud Platform

☐ Other – Write In:: _____ *

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Logic: Show/hide trigger exists.

24) What is your main employment status?*

☐ Fully employed by a company / organization

☐ Partially employed by a company / organization

☐ Self-employed (*a person earning income directly from one's own business, trade, or profession*)

☐ Freelancer (*a person pursuing a profession without a long-term commitment to any one employer*)

☐ Student

☐ Retired

☐ Currently unemployed

☐ Other - Write In:: _____ *

Logic: Hidden unless: #35 Question "What is your main employment status?" is one of the following answers ("Fully employed by a company / organization", "Partially employed by a company / organization", "Self-employed (*a person earning income directly from one's own business, trade, or profession*)", "Freelancer (*a person pursuing a profession without a long-term commitment to any one employer*)")

25) Which of the following best describes your job role(s) regardless of your position level?*

- ☐ Developer / Programmer/ Software Engineer
- ☐ DevOps Engineer / Infrastructure Developer / etc.
- ☐ DBA
- ☐ Architect
- ☐ Tester / QA Engineer
- ☐ Technical support
- ☐ Data analyst / Data engineer
- ☐ Business analyst
- ☐ Team Lead
- ☐ Systems analyst
- ☐ Product Manager
- ☐ UX / UI Designer
- ☐ CIO / CEO / CTO
- ☐ Instructor / Teacher / Tutor / etc.
- ☐ Other - Write In:: _____ *

26) What country do you live in?*

- ☐ Afghanistan
- ☐ Albania
- ☐ Algeria
- ☐ Andorra
- ☐ Angola
- ☐ Antigua and Barbuda
- ☐ Argentina
- ☐ Armenia
- ☐ Australia
- ☐ Austria
- ☐ Azerbaijan
- ☐ Bahamas, The

- ☐ Bahrain
- ☐ Bangladesh
- ☐ Barbados
- ☐ Belarus
- ☐ Belgium
- ☐ Belize
- ☐ Benin
- ☐ Bhutan
- ☐ Bolivia
- ☐ Bosnia and Herzegovina
- ☐ Botswana
- ☐ Brazil
- ☐ Brunei
- ☐ Bulgaria
- ☐ Burkina Faso
- ☐ Burundi
- ☐ Cambodia
- ☐ Cameroon
- ☐ Canada
- ☐ Cape Verde
- ☐ Central African Republic
- ☐ Chad
- ☐ Chile
- ☐ China
- ☐ Colombia
- ☐ Comoros
- ☐ Congo, Democratic Republic of the
- ☐ Congo, Republic of the
- ☐ Costa Rica
- ☐ Cote d'Ivoire
- ☐ Croatia
- ☐ Cuba
- ☐ Curacao

- ☐ Cyprus
- ☐ Czech Republic
- ☐ Denmark
- ☐ Djibouti
- ☐ Dominica
- ☐ Dominican Republic
- ☐ East Timor (see Timor-Leste)
- ☐ Ecuador
- ☐ Egypt
- ☐ El Salvador
- ☐ Equatorial Guinea
- ☐ Eritrea
- ☐ Estonia
- ☐ Ethiopia
- ☐ Fiji
- ☐ Finland
- ☐ France
- ☐ Gabon
- ☐ Gambia, The
- ☐ Georgia
- ☐ Germany
- ☐ Ghana
- ☐ Greece
- ☐ Grenada
- ☐ Guatemala
- ☐ Guinea
- ☐ Guinea-Bissau
- ☐ Guyana
- ☐ Haiti
- ☐ Holy See
- ☐ Honduras
- ☐ Hong Kong
- ☐ Hungary

- ☐ Iceland
- ☐ India
- ☐ Indonesia
- ☐ Iran
- ☐ Iraq
- ☐ Ireland
- ☐ Israel
- ☐ Italy
- ☐ Jamaica
- ☐ Japan
- ☐ Jordan
- ☐ Kazakhstan
- ☐ Kenya
- ☐ Kiribati
- ☐ Kosovo
- ☐ Kuwait
- ☐ Kyrgyzstan
- ☐ Laos
- ☐ Latvia
- ☐ Lebanon
- ☐ Lesotho
- ☐ Liberia
- ☐ Libya
- ☐ Liechtenstein
- ☐ Lithuania
- ☐ Luxembourg
- ☐ Macau
- ☐ Macedonia
- ☐ Madagascar
- ☐ Malawi
- ☐ Malaysia
- ☐ Maldives
- ☐ Mali

- ☐ Malta
- ☐ Marshall Islands
- ☐ Mauritania
- ☐ Mauritius
- ☐ Mexico
- ☐ Micronesia
- ☐ Moldova
- ☐ Monaco
- ☐ Mongolia
- ☐ Montenegro
- ☐ Morocco
- ☐ Mozambique
- ☐ Myanmar
- ☐ Namibia
- ☐ Nauru
- ☐ Nepal
- ☐ Netherlands
- ☐ Netherlands Antilles
- ☐ New Zealand
- ☐ Nicaragua
- ☐ Niger
- ☐ Nigeria
- ☐ North Korea
- ☐ Norway
- ☐ Oman
- ☐ Pakistan
- ☐ Palau
- ☐ Palestinian Territories
- ☐ Panama
- ☐ Papua New Guinea
- ☐ Paraguay
- ☐ Peru
- ☐ Philippines

- ☐ Poland
- ☐ Portugal
- ☐ Qatar
- ☐ Romania
- ☐ Russia
- ☐ Rwanda
- ☐ Saint Kitts and Nevis
- ☐ Saint Lucia
- ☐ Saint Vincent and the Grenadines
- ☐ Samoa
- ☐ San Marino
- ☐ Sao Tome and Principe
- ☐ Saudi Arabia
- ☐ Senegal
- ☐ Serbia
- ☐ Seychelles
- ☐ Sierra Leone
- ☐ Singapore
- ☐ Slovakia
- ☐ Slovenia
- ☐ Solomon Islands
- ☐ Somalia
- ☐ South Africa
- ☐ South Korea
- ☐ South Sudan
- ☐ Spain
- ☐ Sri Lanka
- ☐ Sudan
- ☐ Suriname
- ☐ Swaziland
- ☐ Sweden
- ☐ Switzerland
- ☐ Syria

- ☐ Taiwan
- ☐ Tajikistan
- ☐ Tanzania
- ☐ Thailand
- ☐ Timor-Leste
- ☐ Togo
- ☐ Tonga
- ☐ Trinidad and Tobago
- ☐ Tunisia
- ☐ Turkey
- ☐ Turkmenistan
- ☐ Tuvalu
- ☐ Uganda
- ☐ Ukraine
- ☐ United Arab Emirates
- ☐ United Kingdom
- ☐ United States
- ☐ Uruguay
- ☐ Uzbekistan
- ☐ Vanuatu
- ☐ Venezuela
- ☐ Vietnam
- ☐ Yemen
- ☐ Zambia
- ☐ Zimbabwe

Logic: Show/hide trigger exists.

27) What is your main employment status?*

- ☐ Fully employed by a company / organization
- ☐ Partially employed by a company / organization
- ☐ Freelancer

- ☐ Student
- ☐ Retired
- ☐ Looking for a job
- ☐ Other – Write In:: _____ *

28) What is the highest level of education you have completed?*

- ☐ Bachelor's degree (BA, BSc, B.Eng., etc.)
- ☐ Master's degree (MA, MSc, M.Eng., MBA, etc.)
- ☐ Doctoral degree (Ph.D, Ed.D., etc.)
- ☐ Professional degree (JD, MD, etc.)
- ☐ Other – Write In:: _____ *

Logic: Hidden unless: (#2 Question "For you, data analysis is..." is one of the following answers ("Your primary professional activity", "A secondary/additional activity that you perform as part of your job") AND #38 Question "What is your main employment status?" is one of the following answers ("Fully employed by a company / organization", "Partially employed by a company / organization"))

29) How long have you been working in data analysis?*

- ☐ Less than 1 year
- ☐ 1 to 3 years
- ☐ 3 to 6 years
- ☐ 6 to 10 years
- ☐ More than 10 years

Logic: Hidden unless: (#2 Question "For you, data analysis is..." is one of the following answers ("A hobby", "Other – Write In:") OR #38 Question "What is your main employment status?" is one of the following answers ("Freelancer", "Student", "Retired", "Looking for a job", "Other – Write In:"))

30) How long have you been involved in data analysis?*

- ☐ Less than 1 year
- ☐ 1 to 3 years
- ☐ 3 to 6 years
- ☐ 6 to 10 years
- ☐ More than 10 years

Logic: Hidden unless: #38 Question "What is your main employment status?" is one of the following answers ("Fully employed by a company / organization")

31) Which of the following best describes the level of your current position?*

- ☐ Trainee
- ☐ Junior
- ☐ Middle
- ☐ Senior
- ☐ Other - Write In (Required): _____ *

Logic: Show/hide trigger exists. Hidden unless: #38 Question "What is your main employment status?" is one of the following answers ("Fully employed by a company / organization", "Partially employed by a company / organization")

32) How many people work for your company / organization?*

- ☐ Just me
 - ☐ 2-10
 - ☐ 11-50
 - ☐ 51-500
 - ☐ 501-1,000
 - ☐ 1,001-5,000
 - ☐ More than 5,000
 - ☐ Not sure
-

Page entry logic: This page will show when: (#2 Question "For you, data analysis is...?" is one of the following answers ("Your primary professional activity", "A secondary/additional activity that you perform as part of your job") AND #38 Question "What is your main employment status?" is one of the following answers ("Fully employed by a company / organization", "Partially employed by a company / organization"))

Logic: Hidden unless: #43 Question "How many people work for your company / organization?" is one of the following answers ("2-10", "11-50", "51-500", "501-1,000", "1,001-5,000", "More than 5,000", "Not sure")

33) How many people in total are involved in data analysis at your company?*

- ☐ Just me
- ☐ 2-10
- ☐ 11-50
- ☐ 51-200
- ☐ 201-500
- ☐ More than 500
- ☐ Not sure

Logic: Hidden unless: (#2 Question "For you, data analysis is...?" is one of the following answers ("Your primary professional activity", "A secondary/additional activity that you perform as part of your job") AND #43 Question "How many people work for your company / organization?" is one of the following answers ("2-10", "11-50", "51-500", "501-1,000", "1,001-5,000", "More than 5,000", "Not sure"))

34) Which of the following best describes your job role(s) regardless of your position level?*

- ☐ Developer
- ☐ Architect
- ☐ Data Scientist
- ☐ Data Analyst
- ☐ Data Architect
- ☐ Data Engineer
- ☐ Statistician

- ☐ Business Analyst
- ☐ Data and Analytics Manager
- ☐ Researcher
- ☐ Consultant
- ☐ General/Product Manager
- ☐ Other – Write In: _____ *

Logic: Hidden unless: (#2 Question "For you, data analysis is..." is one of the following answers ("Your primary professional activity", "A secondary/additional activity that you perform as part of your job") AND #43 Question "How many people work for your company / organization?" is one of the following answers ("2-10", "11-50", "51-500", "501-1,000", "1,001-5,000", "More than 5,000", "Not sure"))

35) What is your manager's level of expertise in data analysis?

- ☐ Top expert in data analysis
- ☐ Highly qualified data analysis specialist
- ☐ Has average qualifications in data analysis
- ☐ Has basic qualifications in data analysis
- ☐ Has no qualifications in data analysis

Logic: Hidden unless: (#2 Question "For you, data analysis is..." is one of the following answers ("Your primary professional activity", "A secondary/additional activity that you perform as part of your job") AND #43 Question "How many people work for your company / organization?" is one of the following answers ("2-10", "11-50", "51-500", "501-1,000", "1,001-5,000", "More than 5,000", "Not sure"))

36) To what extent do you associate the following phrase with your manager?

1= not at all, 5= a great deal

	1	2	3	4	5
"My manager gives me realistic assignments that are relevant to my skills and responsibilities, with a clear and specific description of the requirements."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>