Data Scientist

**Industry Demand of Career Data Scientist**

Data scientist is a quite new career in the industry. However, data science is the sexiest job in the 21st century according to Harvard Business Review. The Bureau of Labor Statistics (BLS) reports that the demand for data science skills will drive a 27.9 percent rise in employment in the field through 2026.

Some say that data is the new oil, because of the powerful usage of it. Understanding data and how to work with it will help businesses grow in the right direction. Moreover, there are only few qualified data scientists in the field because this is a quite new career. Hence, careers in data science often offer salaries that are much higher than the national average.

Since every industry nowadays relies on data for their business growth. Data scientists can work in almost every industry. They are needed in almost every field, from health-care, education, banking, government security to e-commerce.

**Salary (Range)**

* Average salary per year in Indonesia Rp 121,241,114/ year
* Average salary per year in US $122,743/ year

**Core Tasks**

* Undertaking data collection, preprocessing and analysis
* Building models to address business problems
* Presenting information using data visualization techniques
* Use a combined knowledge of computer science and applications, modelling, statistics, analytics and maths to solve problems
* Use strong business acumen, as well as an ability to communicate findings, and mine vast amounts of data for useful insights
* Use these insights to influence how an organisation approaches business challenges
* Sift and analyse data from multiple angles, looking for trends that highlight problems or opportunities
* Make recommendations to adapt existing business strategies

**Working Conditions**

* Working with different stakeholders
* Some travel may be required

**Skills Required**

Technical Skills

* Understanding of programming language R, SAS, Python, Matlab, SQL, Hive, Pig, and Spark.
* Statistics
* Math

Soft Skills

* Excellent verbal and written communication skills
* Teamwork
* Strong analytical skill
* Attention to detail

**Career progression data**

* Pursue an undergraduate degree in data science or a closely related field for 3-4 years
* Learn required skills to become a data scientist through bootcamp, online classes, or internship
* Get your first entry-level data scientist job (junior data scientist)
* Mid-level data scientist for 5-10 years
* Senior data scientist >10 years experience

**Possible University Major**

As data science is a relatively new field, some universities might offer it as a specialization in the Computer Science course, or even as a postgraduate program.

* Data Science
* Computer science
* System Information
* Computer engineering
* Finance
* Math
* Statistics

**School subjects required**

* Math
* Computer Science