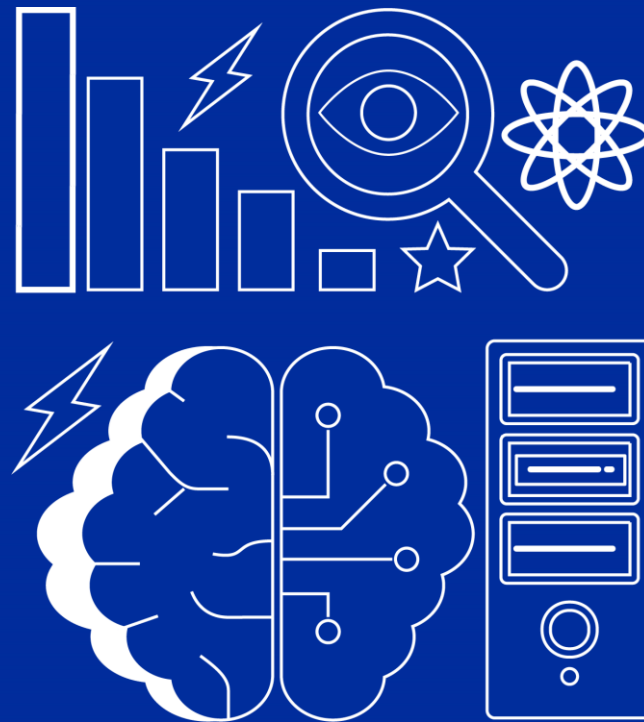# IBM **SkillsBuild**

Interested in data science?

IBM

What is data science?

Data scientists extract insights from data. They use predictive analytics, data mining, text mining, pattern recognition, data modeling, machine learning, and statistical methods to uncover the meaning hidden in vast data sets.

Source:
IBM: Data Scientist

What do data scientists do?

- Map the spread of disease
- Study autonomous transportation
- Support robotics development
- Analyze baseball statistics
- Counsel families on genetics
- Manage the cyber city
- Analyze investments

Source:
7 Seriously Cool Jobs in Data Science

What math skills will I need?

- Statistics
- Algebra and geometry
- Linear algebra
- Calculus
- Discrete mathematics

Source:
The Quant Crunch

How many jobs are there?

In 2015
2,350,000 ⇨ By 2020 **3,640,000**

Source:
The Quant Crunch

What will make me a great data scientist?

- Critical thinking
- Digging for facts and relationships
- Learning on the fly
- Communication

Source:
What Data Scientists Really Do, According to 35 Data Scientists

IBM

What can I earn?

Entry-level median

us**$95,000**

Mid-career

us**$85,000** to
us**$170,000**

Source:
Salaries of Data Scientists

What are the top industries?

- Finance and insurance
- Professional, scientific, and technical services
- Manufacturing
- Information management of companies and enterprises
- Utilities

Source:
IBM: Data Scientist

How will I apply my skills?

- Data science methodologies
- Data access, visualization, and preparation
- Model building to explain relationships and provide predictions
- Communicating insights
- Machine learning
- Programming languages such as R and Python
- Apache Hadoop

Source:
IBM: Data Scientist