Career Day 2032: Data Science Jobs

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AGENDA

- Intros
- The DATA-Ing Game
- Data Science Dive
- In the Classroom
- Next Steps
- Q&A
But First, Housekeeping...

Audio
- Can’t hear? Be sure that your computer is allowing audio output
- You can ask questions in the chat if you’re having issues - we have live tech support!

Questions
- Type your questions into the questions box - we have an EVERFI rep ready to answer in real time, or we will answer them during the Q&A

Social
- Find us on Twitter, Instagram, Facebook, and TikTok @EVERFIK12 and use #EVERFIempowers and #LearnOn2022 when you share out!
Use the live poll to answer the following question:

What most closely aligns to your role?

(If “other,” drop in the chat)
Our Expertise

- 15+ Years in Digital Education
- Content Developed with Subject Matter Experts
- Aligned to State and National Standards
- Dedicated Implementation Team
The Data-ing Game
Help us hire someone in Data Science!

We need help hiring for a new web developer, we are looking for a professional who...

- Is responsible for the **design and construction** of our website.
- Ensures that the site meets **user expectations** for aesthetic & functionality
- Understand **coding** languages
- Has good **problem solving** skills
Help us hire someone in Data Science!

- Let’s read through each candidate’s qualifications and determine who is the best fit for the role of web developer.
- Feel free to chat in questions you’d like to ask.
Contestant #1: Sven

- Has a Bachelor’s Degree in Data Science and Analytics
- Excellent analytical and numerical skills
- Devises strategies for success
- Studies market conditions and competitors
- Up to date on the latest trends
- Favorite spot: Casa Nova
Contestant #2: Nic

- Has an Associate of Science in Data Analytics
- Understands the latest web applications
- Collaborates to develop content criteria
- Troubleshoots web/technical issues
- Fluent in coding languages
- Favorite spot: Project Brunch
Contestant #3: Luna

- Has a Master’s Degree in Data Science
- Researches & analyzes governments
- Collects data from public surveys & elections
- Forecasts political, social & economic trends
- Develops political theories
- Favorite spot: Piccolino Restaurant
Use the live poll to answer the following question:

Who is the best fit for the web developer position?
Political Analyst

Political analysts collect and interpret economic, social, and political data. Political campaigns often hire data science professionals to identify and influence potential voters.

Avg Salary: $122,220

Market Research Analyst

Market research analysts study market conditions, trends, and consumer information in order to identify the best way to sell and advertise a product or service.

Avg Salary: $63,790

Web Developer

These professionals design & build websites. Front-end developers design the overall appearance & user interface of a website, while back-end developers focus more on technical construction & maintenance.

Avg Salary: $73,760

Political Analyst

Political analysts collect and interpret economic, social, and political data. Political campaigns often hire data science professionals to identify and influence potential voters.

Avg Salary: $122,220
Use the live poll to answer the following question:

What do you know about data science?
So what is Data Science?

A way to interpret and make sense of data:
- preparing data for analysis, cleaning it up, summarizing, and using the data to run advanced data analysis

A combination of many tracks:
- statistics, scientific methods, artificial intelligence (AI), and data analysis

An exciting field that’s in demand:
- a data scientist interprets large amounts of data to solve complex problems – such as understanding target audience needs or adapting business strategies to respond to market trends

The Stats
- The data science field will grow about 28% through 2026.
- On average, salaries for data scientists will grow 14%.
- In 2020 there were 3 times as many data science job postings vs. searches
Data Literacy is a Skill in Demand

**11%**

Employment in computer and information technology occupations is projected to grow 11% from 2019 to 2029.

**21%**

Many assume younger generations have excellent data skills, but only 21% of 16- to 24-year-old students are data literate.

“AI will increasingly take over routine coding jobs. Longer term and larger employment opportunities lie in data science - assembling, scrubbing and analyzing big data sets.”
Background & Research
Data Science Foundations empowers students with knowledge about the fundamentals of data science, its currency in the job market, and its applicability to everyday life.
Data Science In Demand

**Future Jobs**
- The data science field will grow about **28%** through 2026.
- On average salaries for data scientist will grow **14%**.
- In 2020 there were **3 times** as many data science job postings vs. searches.

**Across Interest Areas**
- Finance
- Technology
- Healthcare
- Manufacturing
- Business
- Agriculture

**Gap in Resources**
- Coursera/Udemy is for highly motivated adults
- Coding classes aren’t enough
- In 2020, LAUSD curriculum is used by over 3,200 students in 51 schools. Several other states want to use it.
General Career Path

- Education at an accredited college
  *Statistics courses are great!*
- Trade School/Bootcamp
  *Can be a great way to get into the field faster!*
- Lab experience with a professor
- Practical experience at an internship
- Career in Data Science!
  - Machine Learning Engineer
  - Marketing Analyst
  - Clinical Data Manager
  - Team Statistician
Data Science Philosophy

- **Demystifies data science** through providing realistic scenarios in a safe practice environment
- Creates an **interactive learning experience** that requires higher cognitive demand and problem-solving skills
- **Provides immersive experience** by including an engaging narrative, interesting visual design, and applicable activities
- Introduces a diverse cast of characters that reflects the diverse audience of students taking the course
Digital Course Dive
Data Science Foundations

Grade Level: 9th - 12th
Total Lessons: 4 lessons, 30 mins each
Course Length: 80 mins
Subject Alignment: CTE, Math, Science
Mobile-Friendly

At-a-Glance
Data Science Foundations is a “bootcamp” offering designed to empower students with knowledge about the fundamentals of data science, its currency in the job market, and its applicability to everyday life.

Course Highlights
- Scenario-based narrative
- Immersive and diverse environments and characters
- Learning through problem solving
- Higher order thinking skills

Course Topics
- Data Science Basics
- Collecting, Cleaning, and Validating Data
- Analyzing and Visualizing Data
- Reporting and Acting on Data

Also Available in Spanish
Course Structure: Data Science Basics

Pre-Assessment

Immersion
Engage with real-life scenarios

Meet the Characters
- Malachi: I run Threadr, an online shopping company.
- Noor: I work at a tech company and a sports business owner.

Understanding & Application
Interact with content in a meaningful way

Data Science
- Sales: Evaluate data related to sales to understand patterns and predict future sales.
- Sports: Analyze data from sports analytics to improve performance.
- Space Exploration: Use data to explore and understand space missions.

Descriptive or Predictive?
- Sales data: Descriptive analysis to understand current sales trends.
- Sports data: Predictive analysis to forecast future matches.

Mini-Lab
Dive deeper into problem solving as a data scientist

Post-Assessment
Data Science Exploration: Financial Wellness

At-a-Glance
Data Science Exploration: Financial Wellness is dedicated to providing high school students with the skills and knowledge they need to accurately evaluate the ROI of data science education and career options within the banking industry. It also breaks down the positive and negative behaviors associated with financial wellness.

Course Highlights
- Scenario-based narrative
- Immersive and diverse environments and characters
- Learning through problem solving
- Higher order thinking skills

Course Topics
- Data Science Review
- Data Science in the Banking Industry
- Financial Wellness Simulation

Also Available in Spanish
Data Science Exploration: Banking Fraud

Grade Level: 9th - 12th
Total Lessons: 2 lessons, 8 & 15 mins
Course Length: 20-25 mins
Subject Alignment: CTE, Math, Science
Languages: English, Spanish
Mobile-Friendly

At-a-Glance
Data Science Exploration: Banking Fraud is dedicated to providing high school students with the skills and knowledge they need to accurately evaluate the ROI of data science education and career options within the banking industry.

Course Highlights
- Scenario-based narrative
- Immersive and diverse environments and characters
- Learning through problem solving
- Higher order thinking skills

Course Topics
- Data Science Review
- Data Science in the Banking Industry
- Banking Fraud Simulation
Course Demo
Welcome!

This module will introduce you to the basics of Data Science.

You will explore how data science is used in the world today, how the field is growing, and how data scientists do their work.

First, answer a few questions about what you already know about data science.
Diversity, Equity, Inclusion, & Access

Character Design
• Diverse characters
• Various skin tones, hair textures, body shapes
• Clothing inclusive of socio-economic classes

Narrative
• Varied career experience
• Rural, suburban, urban backgrounds
• Mistakes do not equal failure

Additional Considerations
• Avoid idioms
• User testing
• Spanish translation
• Accessibility testing
Getting Started with EVERFI
Registration

Visit EVERFI.com/create

▷ Click “Teacher”
Find Your School

▸ Enter your country & state
▸ Find your school
▸ Click “Next”
Complete Your Profile

- Enter your information
- Use your school email
- Click “Create Account”
Next Steps

Recordings and your certificate will be emailed to you after the conference

**LEARN**

Visit everfi.com/k-12 for more information about EVERFI and our resources.

**TRY**

Register for your free account at everfi.com/create

Try out Data Science Foundations or Data Science: Financial Wellness!

**SHARE**

Share with your colleagues

Share your journey on social media. Tag @EVERFIK12!
Let’s go Forward Together!

#LearnOn2022

- Explore resources at Join the EVERFI K-12 Facebook Page: Educator Resources for Real-World Learning
- Follow us on social

@EVERFIK12
Join Our Lively Community

Participate today and beyond!

Register at everfi.com/newteacher

Join our community on social media!

@EVERFIK12
Resources

See below for some of the resources we mentioned throughout the session...

- Teacher Registration Guide
- Student Registration Guide
- Full K12 Resource List
- Data Science Foundations Curriculum Guide