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Economic Degrees Prepare Students for the Job of the Year

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Nikki Castle

Earlier this year, Glassdoor's report of the top 50 jobs in the country ranked data scientists in the number one spot for the third year running. That's interesting information for any college student thinking about their next steps, but what does a data scientist do and why is it such an important role?

It's a complicated career requiring a unique blend of skills in computer science and statistics, as well as strong business acumen. The complex nature of the role is reflected in its most popular definition in spite of the fact that it's a bit vague: data scientists are better statisticians than most programmers, and better programmers than most statisticians.

Data scientists earn their top spot because they're the brains behind the machine learning methods that make the world's leading companies so successful at understanding their customers' needs and their own operational processes. Netflix and Amazon rely on data science to power their recommendation systems. Machine learning is also at the crux of building any artificially intelligent system, but these are just a couple out of countless examples. The field is as exciting as it is lucrative, so economics students will be excited to hear

they're developing an ideal background for the job.

A study conducted by 365 Data Science surveyed 1,001 data scientists to identify commonalities in their academic and career backgrounds. Among them, 19% had degrees in economics or other social sciences. Though it may come as a surprise, only 13% had majors belonging to the "Data Science and Analysis"

cluster identified by the research team. That's because this field is relatively new, and academic programs are still catching up. Economics students interested in pursuing data science shouldn't be discouraged if they're not already in a program with a specific focus on machine learning — just make sure you're not neglecting mathematics and statistics, and take some computer science courses to round out your skills.

Quantitative reasoning is the foundation of applied economics. Luckily for students in this discipline, the same is true for data science. In fact, two of the most common approaches to data science problems are linear and logistic regression, which should already be familiar to anyone who has studied econometrics. Learning some of the more complex machine learning algorithms will come a lot more naturally to those who have already developed an understanding of statistical best practice-

es. Even if coding in Python or R is completely foreign, economists are likely to come to the table with the requisite knowledge to assess the accuracy of their predictive models both before and after they're deployed to inform critical decisions in an organization.

Since entering the workforce after graduating in economics and international studies from Illinois Wesleyan University, I've personally taken a great interest in data science. I'm excited to work in marketing analytics at a company I believe is at the forefront of developments in this field. If you're interested, I encourage you to challenge yourself to learn new technologies or programming languages to conduct your next analytical projects, or simply explore free courses online that will help round out your skills to better prepare you for a career in deriving and communicating insights from data.

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