

A brief on Data Science Related Jobs Postings in the Wash. DC Area

Philip Bradfield

January 2017

General Assembly

DC-DSI-3

Abstract

The field of “data science” is growing rapidly. “the sexiest job of the 21st Century” is how it was described in an April 2015 Forbes on-line publication. This report surmises a study on recent ‘data science’ related job postings for the Washington DC area on the job web site, Indeed.com. Information about job postings on Indeed was gathered to determine the median salary for that area and what aspects and skills employers are looking for when they hire a data scientist.

The Indeed.com job posting web site is one of the major aggregators of science related job openings. Company name, location, job titles, salary information and other relevant information was ‘scraped’ from the Indeed web pages as well as related pages posted by the companies that were looking to hire someone for a data science/analyst related job.

Information from more than 1000 job postings was gathered using web scraping techniques. That information was analyzed and used to build two different models that could be used to indicate if the pay for a job would be more than the median income for a data related science job in the DC area.

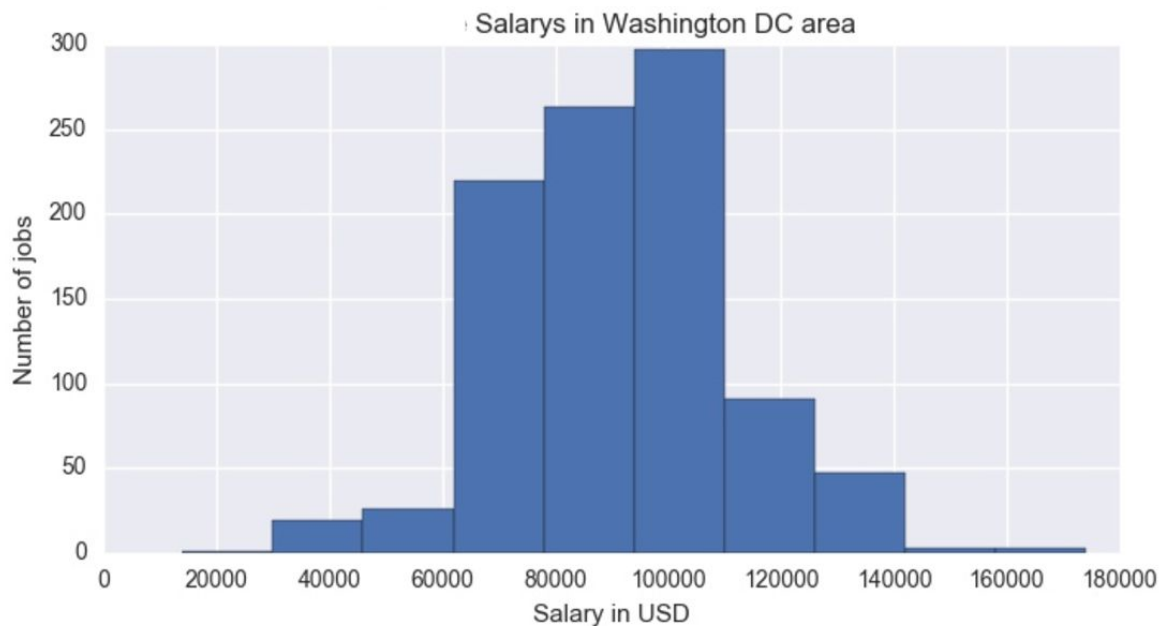


Figure 1. Salaries for data related jobs in the Washington DC area January 2017.

Taking into account many different data science related jobs in the DC area, the median income for the area is approximately \$91,000. The job title name that carried the most importance on salaries was “data analyst”. “Research analyst” was the second job title in importance. The location that carried the most importance was, not surprisingly, Washington DC with Lexington Park MD being second. (There are quite few defense contractors in the Lexington Park area.)

Skills that employers are looking for include experience with SQL, Excel, No-SQL, SAS, Java, Hadoop, Python and C++. These are methods and programming languages that are

used in the field of data science. In a word search of the job pages the most common key-words were ‘experience’, ‘security’ & ‘clearance’, ‘degree’ and ‘BS’ and ‘years of experience’.

Because of the demand for data scientist, those with experience can command a higher salary. In addition, having a security clearance is a big plus because that can save an employer the many thousands of dollars it takes to get someone a clearance. (Most defense contractors that proliferate the area require a clearance.)

Note: cities and the job markets associated with them vary greatly. The program written for this briefing can be easily be adapted for another city or area. It could also be expanded to cover a larger area but because cities like Washington and New York or San Francisco are so different, the author thinks it best to look at each those markets separately.

Results

The rather high median salary of \$91,000 in the DC area for data science job openings is not surprising. Washington has hundreds of high technology companies in and around its beltway. Further, the alphabet storm of government agencies, such as the DoD, NIH, NIST, NSA and numerous others, need those with data science training in order to better serve the public. This demand, and the paucity of those trained for it, will continue to push up the salaries for data scientists. One way of monitoring the changes in this field is to follow job postings because well run companies are always looking to implement the most recent improvements in technology in order gain an advantage or just to remain competitive.

References

Lastname, C. (2008). Title of the source without caps except Proper Nouns or: First word after colon. *The Journal or Publication Italicized and Capped*, Vol#(Issue#), Page numbers.

Lastname, O. (2010). Online journal using DOI or digital object identifier. *Main Online Journal Name*, Vol#(Issue#), 159-192. doi: 10.1000/182

Lastname, W. (2009). If there is no DOI use the URL of the main website referenced. *Article Without DOI Reference*, Vol#(Issue#), 166-212. Retrieved from <http://www.example.com>