



Data Science Academy

Turn your talented analysts into data scientists

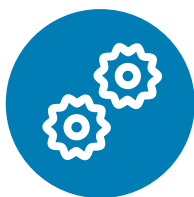
Problem:

Data scientist has been and is nowadays scarce resource. It is difficult to find data wrangler, modeler, programmer, technologist, visualizer and communicator in one person. You can either recruit from outside your firm or develop talent you already have. The second option is way cheaper if you have the talented people already.

The fastest-growing roles are Data Scientists and Advanced Analysts, which are projected to see demand spike by 28% by 2020. Data Science and Analyst jobs are among the most challenging to fill, taking five days longer to find qualified candidates than the market average. Employers are willing to pay premium salaries for professionals with expertise in these areas as well.

Forbes.com





Solution:

Data Science Academy is 10 weeks program to develop data science skills of your employees from zero to intermediate level. The program consists of 10 lessons, 3 hours each + 6 home assignments. This means that during the course participants should spend 20% of their time on Data Science Academy and the remaining 80% is still available to your business. After the course you can assign them your data science use cases right away.

1	SQL1	Data, SQL basics, SQL where, SQL joins
2	SQL2	Group by, having, subqueries, windowing
3	SQL3	Indexing, optimization, SQL coding standards, data warehousing, predictors
4	DS1	Data science use cases, skills, algorithms overview, tools for data science, Python, R
5	DS2	Clustering, behavioral segmentation, actor segmentation in Python
6	DS3	Propensity models, single factor analysis, binning, binary classifiers, war prediction in R
7	DS4	Model life cycle, hands on propensity modeling
8	DV1	Data visualization when and why, terminology, tools overview
9	DV2	Data discovery hands on case study
10	DV3	Dashboard prototyping hands on case study

Contact:



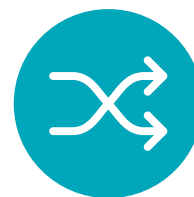
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Benefit:

Turning your talented analysts into data scientists is the cheapest way to get qualified data science people. It is also the fastest way – we can make it in 10 weeks. If you do not have the analytical infrastructure, participants can use the Deloitte one during the course. Last but not least: should you have any other issue which hinders you from effectively using data science in your organization (data quality issues, data availability issues, missing or bad analytical infrastructure, find the right use cases), we are happy to support you in those areas end-to-end.



Approach:

The content is organized into three main parts: data, machine learning and visualization. We start with data crunching and extensive hands on exercises using SQL. After mastering the data preparation we give overview of data science use cases relevant for the client domain and the algorithms to use for model development. We discuss the data science toolkit and pros and cons of the main vendors. We go deeper into clustering use case and binary classification. The hands on exercise involves building the development pipeline. The last three lessons are dedicated to data visualization. Your employees will learn how humans perceive information, how to convey the story which data tell, how to separate important information from the noise, how to use colors, we give examples of good and bad visualizations.

Each of the six home assignments is checked on one-to-one individual interview between our lector and participant. Based on the number of checked assignments and their quality each participant can reach either basic or intermediate level certificate. Successful participants are finally decorated with certificates on the final ceremony. Slides from each lesson are distributed to participants as PPTX files.

There are two workbench options: either participants use Deloitte infrastructure and work on predefined datasets with tools like R, Python and Tableau, or participants use your data science workbench, your data and your tools for data analysis and visualization. In terms of venue, we can offer training rooms in our nearest Deloitte office, or conduct the lessons on your premise. The only requirement is that each participant brings his/her own PC to work with.