Data Analytics and I

by

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The Rice Data Analytics Boot Camp provides me a great opportunity to expand beyond my current front-end web development skill set.  I first learned about the course by reading an article on the front page of the *Houston Chronicle* business section.  The knowledge and number of technical skills which could be acquired in the course was quite impressive!  Of all the skills mentioned, Python programming really peaked my interest, including scripting with NumPy, Pandas, Matplotlib, API interactions, and social media mining.

Web visualization implementing dashboarding and JavaScript charting will increase my front-end development knowledge, along with D3.js for data driven documents and Leaflet.js for geomapping.  The course will introduce advanced Excel skills integrating pivot tables to reorganize data, in addition to VBA scripting for macro development using variables and programming logic. MongoDB which does not use Structured Query Language will be utilized with databases.  MySQL will be incorporated as the database management system.

A knowledge of fundamental statistics will allow the use of datasets to model, predict, and forecast trends. This will be particularly helpful in creating meaningful visualizations from legacy systems and heterogeneous datasets.  These visualization skills seem to be in particularly high demand. Apache Hadoop will be applied with big data analytics, and machine learning will be introduced as a statistical technique for artificial intelligence. In addition, implementing interactive data visualization for business intelligence software will be made possible with Tableau.

Being able to work on real-world exercises in a collaborative environment, integrating Git/GitHub along with Slack, will be a new method to me.  The professional portfolio developed throughout the class will be a great asset to have for presentation. Boot camp will give me the confidence to use terminology and methods known by professionals in the data analytics field which will help my marketability with future clients and employers.  I look forward to the comradery and network which will be developed with my fellow classmates.

New skills gained in data analytics and visualization from boot camp will significantly enhance my career possibilities across various disciplines.  After graduating from Baylor University (Bachelor of Science) and Texas A&M University (Master of Science) with degrees in Geology, I worked as a petroleum geologist with Phillips 66 and Mitchell Energy.  During this time, I proposed and drilled around 100 successful oil and gas wells. With Houston being the energy capital of the world, consulting (or working directly) with one of the major energy corporations as a data scientist would be a strong career path.

When Houston had a recession in the energy business, I returned to college and started a second career, completing a two-year certification at Lone Star College in interactive multimedia production management.  Afterward, I worked for a software company in The Woodlands as a project manager. Two years later, I started a multimedia company which became an affiliate of the Houston Advanced Research Center. At the research center, I served as the consultant for their traditional and new media projects.  Another career path I may pursue would be as a data scientist with an emerging technology company, possibly in a remote capacity.