0521

Monday, May 20, 2019

9:41 AM

My knowledge about GAMMA:

Support analytical projects of data science;

My background:

I worked in risk modeling team at Santander Bank for 2.5 years. My main responsibility is to develop and implement **statistical predictive models** to forecast the credit loss for the bank's commercial and consumer portfolios. I used **machine learning methods** like logistic regression/decision tree to predict the loss rates for these loans. For programming, I mainly use python, SAS and SQL.

Since the model user of our models are couple line of business in our bank, I have a lot of chances to work with some **business partners**. I worked with business to discuss their needs, and the data requirement and presented to them with our proposed model methodologies, and discussed the results with them. So I believe I have very strong problem solving and communication skills. And through these collaboration with the business, I learn sufficient knowledge about the industry like the financial markets and financial products.

I also work closely with T&O, our IT team, to discuss and validate the **data**. I believe I have strong **quantitative background and programming skills**.

Why change:

I’ve learned a great deal during my current job in both technical skills like programming, building the models, and also communication skills. It has been a great experience.

My interest has always been the application of advanced data science techniques in the industry. But I don't want to just focus on one limited fields like the credit risk modeling I am currently doing. *(Especially the current situation of****de-regulation****, there is not too much new thing to learn in the near future.)* So I would like to **try some other fields** in the industry.

**Consulting** is a field that I am currently very interested in. I will have the opportunities to work on different projects using most state-of-the-art data science techniques to get insights from the data and predict the unknown and make more accurate decisions. That really excites me.

* + DS/ML:

Using machine learning is that we are trying to teach machines to “Learn from Experience”.

Machine learning algorithms use computational methods to “learn” information directly from data without relying on a predetermined equation as a model. Like regression, you have a predetermined equation like y = ax + b; For Machine learning algorithm you don't need an equation like this.

How it work is that we provide many many examples to the computer, so that they learn from their mistakes on those examples. The algorithms can improve their performance as the number of samples available for learning increases. So the ML-Algorithms find natural patterns within the data, get insights from it and predict the unknown for better and more accurate decisions compared to some of the conventional methods.

Expectation: 110k

My question:

What's next? Hiring process; Guidance for the interview preparation? Case interview

How much time for travelling?/Remote

Finance knowledge:

Commercial (financials: EBITDA/Quick Ratio/Profit margin/Sales growth + macro economics: Unemployment rate/HPI/GDP)

Consumer (Small Business Banking: FICO/Location/Product type + macro economics: Unemployment rate/Salary growth/household obligation ratio);

For mortgage, add Product type is (fixed/floating rates)/LTV/Loan Age

Data visualization:

Sensitivity analysis:

Key risk driver plots

Scenario sensitivity

Why BCG? Personal connection:

Watch news/social media

Glenn 0521 3pm:

Intro of GAMMA: analytics projects especially DS

GAMMA consulting: face clients

GAMMA F: support case team; technical

Five team: Data engineering/GEO/Predictive/Optimization/**Automation and programming**

Main work: gather data/**validate** data

Qualification: financial analyst + programming

Location: Boston seaport

Ask for: 110k-120k

Questions:

Work with business partners

Data validation practices

Best work environment for me

Python question;

List and dictionary; Immutable: tuple; shallow copy and deep copy

Next steps:

* + Webex with hiring manager: Justine Watt (similar background: from financial to data analytics)
  + Tech: Shawn; python skills
  + Case study: typical consulting; mock exam
  + Onsite

0530: Glenn tips:

Ask:

* + Behavior, not case/technical
  + Dress code: business shirt tire and suit?

Hi Glenn,

Thanks for the update! I saw the email from Alexandra, and I will set up the interview time with her.

Just a quick question about the upcoming interview with Justine Watt: I remembered last time you mentioned on our call that she is the hiring manager of the position. So I guess the interview with Justine will be more of going through background and behavioral interview, instead of a technical interview. Am I right?

Thanks!

Steven

Hi Alexandra,

Thanks for the update! I was excited to receive your email regarding the interview. My current availability for next Monday to Wednesday is as follows:

6.3: 10am-11am

6.4: 2pm-4pm

6.5: 10am-11am; 2pm-5pm

Please let me know if these time slots work, or I can provide more availability .

Thanks,

Steven

I am fortunate to have had the opportunity to work with Justine Watt over the last five years. During that time I have come to know Justine as smart, compassionate, driven, focused, fearless and collaborative. From scoping a case to driving a team toward a common goal, she is always quick as a whip, asking probing questions that help to lead to the most logical conclusions. Despite her work ethic and ‘client first’ mentality, she always considers the unique circumstances of every team player and is the first to appropriately recognize and advocate for work/life balance for the members of her team. As an individual contributor and as a team lead, once on a case, she tunes a laser focus on the task at hand and is always playing a key role in driving to the end goal. Justine is fearless of any task put before her, diving right into the mix without hesitation. That said, she is the first to ensure that all stakeholders and team member perspectives are allowed a forum for consideration in a truly collaborative fashion. Justine is a talented team leader, and I am fortunate to have had the opportunity to partner with her over these years.

Justine brings a lot to a an Analytics team - I would work with her again in a heartbeat! She takes pride in her work and strives for the highest quality. -She has a strong analytic mind that finds creative ways of solving complex analytic challenges -She communicates complex analytic concepts clearly and concisely to non-technical business stakeholders -She anticipates project management risks and develops contingency plans. -She's a dedicated people manager who fights hard for the success of her direct reports. -She is a responsible employee who instinctually makes the right decisions. If ever you are considering Justine for a position in your organization - please don't hesitate to contact me for a reference.

Justine is one of the best managers I have had in my career. Her ability to problem solve, simplify and get things done in the face of multiple priorities from client and internal stakeholders is truly remarkable. At BCG, it is not uncommon for engagements to encounter significant complications. Justine manages to distill down complexities to their very essence and triage analyst resources in the most efficient way possible. A seemingly dead-end is never a dead-end for Justine. Lastly, she is a manager that cares about her reports. I am very grateful she continues to be a mentor of mine to this day

12-Apr-2019

**Senior Analyst - GAMMA**

8533BR

Analytics & AI

WHAT YOU'LL DO

BCG has established GAMMA S to support case teams in managing and realizing insight and opportunity from the increasing **analytical intensity** of our clients' problems. **Data Scientists** together with **Data Engineers**, Data Visualization Specialists, Scientific Modelers and Scientific Programmers as well Geospatial Analysts, are the core of the **Analytics Solutions** service.  They work closely with consultants and case teams to provide both consultation on **data visualization** subject matter expertise and hands-on support to case teams, focusing on data visualization, advanced analytics tools, modeling, and custom-developed client-facing analytics deliverables.

The Senior Analyst will join a growing team with a global presence, and will work with both customers and team members worldwide. Successful candidates will possess advanced **analytical technical expertise**, strong **collaborative and execution capabilities**, excellent **communication skills**, a practical and flexible mindset, and high **attention to detail** and work quality.

YOU'RE GOOD AT

*Creating****analysis plan****/framework*

Come up with the analysis plan and analysis solution framework to solve the business problem

Clearly define the **assumptions, requirements, expectations** and end results

*Perform data acquisition*

Act as technical point of contact for client teams to communicate the **data requirements**

Acquire accurate and sufficient data from the client required to solve the business problem

Perform data gap analysis and recommend additional sources of data, if needed

*Generate business insights from data*

Enhance case team's understanding of client's business with basic statistical analysis of data

Develop advanced **statistical models** that highlight meaningful business drivers

Employ **data mining techniques** to discover previously unknown process dependencies

Analyse unstructured data (e.g. text) to further client's understanding of customer sentiment and process dependencies

Validate exiting and develop new business hypotheses via a broad spectrum of **data science techniques**

*Presentation and visualization*

Convey meaningful insights via effective display of data analysis outcomes

Leverage existing tools to allow clients to explore data in new ways

Able to present the **technical results to non-technical clients** and other internal stakeholders using presentation tools like PowerPoint etc.

YOU BRING (EXPERIENCE & QUALIFICATIONS)

Education & Experience:

Undergraduate degree in a field linked to statistics, data mining, applied mathematics, business analytics, engineering, computing or related field is required; advanced degree is preferred

**2-4 years** relevant industry experience, focus on advanced analytics focused **programming and scripting** preferred

Previous experience working in a **global organization** or professional services firm is preferred

Experience with **external client** or senior internal stakeholder interaction and management is preferred

Data Mining: e.g. **Decision trees**, CHAID/CART, Dimension reduction (FA, PCA, …) etc.

**Statistics** techniques: e.g. ANOVA, Clustering, Regression, Discriminant analysis, SEM etc.

**Machine Learning**: e.g. Neural Net, SVM, Random Forest, KNN, GBM, Genetic algo, NLP etc.

Deep learning/AI: e.g. CNN, RNN, Boltzmann machines, Self-Organizing maps, Q-Learning etc.

Familiarity with a broad base of analytics tools & languages:

Data Science: e.g. R, **Python**, WEKA, SPSS, MATLAB, Dataiku, AzureML, Keras, H2O, SAS, RapidMiner, SPSS, Spark, etc.

Data management: e.g. **SQL**, PostGRESql, Hadoop/Hive, Alteryx, etc.

Data visualization: e.g. **Tableau**, **RShiny** etc.

Optimization: Open Solver, AIMMS, Llamasoft, IBM Cplex etc.

Text mining & unstructured data analytics

Programming and/or scripting experience a plus: e.g. Python, C#, Perl, SQL, …

Application development a plus (VBA, .net, Java, …)

Web app development a plus (ASP.net, Javascript, …)

D3 libraries a plus

CITY

Boston

COUNTRY

United States

YOU'LL BE TRAVELLING

Yes (20%)

From <<https://onenote.officeapps.live.com/o/onenoteframe.aspx?ui=en%2DUS&rs=en%2DUS&WOPISrc=https%3A%2F%2Flivejohnshopkins%2Dmy%2Esharepoint%2Ecom%2Fpersonal%2Fwpeng7%5Fjh%5Fedu%2F%5Fvti%5Fbin%2Fwopi%2Eashx%2Ffolders%2Fd2ededc749d048b5912134511b830223&wd=target%28Zhunbei%2Eone%7Cc359467a%2D6404%2D4e5d%2D93c1%2D086886fbdee1%2F0514%7Cb667f892%2D4f22%2D4cd9%2D842f%2D4ffa79d91e65%2F%29&wdEnableRoaming=1&mscc=1&wdODB=1&hid=567ade9e-f095-8000-c0ef-4a3d34d14a30&wdorigin=ExternalSite>>