DATA SCIENCE CAREER PLANNING DOCUMENT

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Thinkful Data Science Program: Spring 2018

April 2018

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The Low-Down

The field of Data Science has experienced exponential growth over the past decade, lending itself to creative applications outside of its standard circle of influence. As more companies begin to understand the importance of insightful data and analytics, opportunities are created for Data Scienctists to explore new research contexts, subject matters and audiences. Consequently, incoming professionals have more options when searching for jobs and a larger selection of industries when considering the trajectory of their career paths.

As an incoming professional myself, I am thankful to have such a wide variety of options. After reviewing some current listings and popular fields, I have isolated a few trends in potential employers that grab my attention, along with certain characteristics of job descriptions and positions I would like to have, which I will discuss in the following pages. In the spirit of aiming for the moon and landing amidst stars, I wil start with a description of my ideal position, in comparison to recent job postings, LinkedIn searchers and research on the current job market.

If I were to describe this position to family members, it would resemble the following: My position involves designing studies to observe and analyze [customer/market behavior] and [product results/information] to help companies understand how their product is performing and how their customers are interacting with it. This helps them make informed decisions gives them a higher chance at succeding with whatever endeavors they lend their attention and resources to. I work with a team to gather and analyze information (based on the needs of other departments within the company), then polish and describe it to other leaders within multiple departments to inform everyone of what the results reveal and how these can be used to their advantage.

In describing this to a professional, it would be something along the lines of: I work for x [corporation or better yet, think tank/research organization] with study design and analysis. My position bridges the gap between globally understanding the goals and visions of our projects with technical implementation and creative application of new techniques, technology, story-telling, analysis and communication. I enjoy using Python, Pandas, Matplotlib, Seaborn, etc to find interesting and insightful ways of highlighting important aspects of a data set while using Matplotlib, Seaborn and cutting edge languages to create impelling visualizations. I present these findings to the C-Executives and other team leaders on a quarterly or monthly basis as needed and use these meetings to inform our subsequent projects.

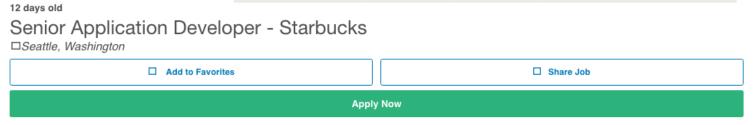
Most importantly, I work for a corporation that has its driving ambitions set on something larger than mere profit margins. It is a company that recognizes its humanity, not only on behalf of its customers and audience, but on behalf of its employees as well. It is a company that recognizes its role in progressing shared ideals and human thought as opposed to maintaining current standards. It is a company that challenges the expectations of its respective field as well as the expectations humans frequently set for themselves and the future they've envisioned. I am proud to work for this company and am grateful for the flexibility it allows for a mixture of working remotely as well as travel to and from international offices. Most importantly, the coffee in the employee lounge reminds me of espresso in Florence and the seeing-eye dog I am training has loved coming into the office to meet my co-workers.

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Job Market Research



Job Summary And Mission

We are seeking an experienced, self-motivated Java developer with 5+ years of experience in developing implemention applications and 7+ technology experience. As an application developer senior, you will collaboratively identify, design, develop and deploy technology and process solutions to implement highly scalable reactive application platform solutions in Cloud based Linux environments. This role requires deep technical expertise, domain proficiency, platform depth, and leadership. Typical activities include requirements analysis, solution design, technical development, and process improvement coupled with the ability to drive efforts and solution improvements effectively across various IT and business functions. In addition to delivering new technology and enhancing/supporting existing systems, an effective application developer senior contributes relevant technical, functional, and process expertise, negotiates and drives alignment, and coaches and mentors less-experienced developers. Models and acts in accordance with Starbucks guiding principles.

While this position calls for an App Developer, there were a few elements that I wanted to highlight, especially since it is for a company I respect and would like to work for. "Participates in solution design process" is an aspect I would enjoy as it involves creativity and collaboration. "Requirements analysis, solution design, technical development and process improvement" are also responsibilities I would enjoy. Working across different departments would only make the job more interesting and I would welcome the opportunity to work with others.

There were a lot of elements I liked about this position with Spotify:

- The creative industry is certainly a plus;
- "You'll be an essential partner in guiding the growth and direction of Spotify Premium."
- "...you'll have access to petabytes of data and will get the opportunity to be creative with how you drive insights from that."
- "Above all, your work will impact the way the world expriences music."
- "Learning and improving is part of our daily routine and you will be free to develop your own skills and ways of working."

11 days old Data Scientist, Premium Analytics - Spotify □New York, New York

Add to Favorites

Apply Now

Do you want to help guide the core business of Spotify using insights from analyses and data?

The mission of our Premium Analytics Team is to bring Spotify Premium to more users across the globe and to constantly evolve and improve our offering. You'll be an essential partner in guiding the growth and direction of Spotify Premium. At your fingertips you'll have access to petabytes of data, and will get the opportunity to be creative with how you drive insights from that. Above all, your work will impact the way the world experiences music

You will work with a global team of world-class analysts, data scientists, marketers, business managers and engineers. We are all passionate about what we do, and move forward with high impact projects at a high pace. Learning and improving is part of our daily routine, and you will be free to develop your own skills and ways of working.

What You'll Do

- . Drive business decisions and help tailor our offerings by synthesizing insights and recommendations from troves of data.
- · Work with business stakeholders to understand the change they are driving and help them discover new opportunities.
- · Design and automate pipelines, experimentation systems, and models to ensure quick delivery of key insights.
- · Be an expert and sounding board to our business managers and partners.

11 days old Senior BI Data Analyst - Warner Bros. □Burbank, California □ Add to Favorites ☐ Share Job **Apply Now**

Warner Bros. Technology Data Intelligence Department seeks a Senior Business Intelligence Data Analyst for the Data Analytics and Visualization team. The Data Analytics and Visualization team is responsible for collecting, aggregating, analyzing and reporting across all media data. Our goal is to provide insights and enable data driven decisions to our Warner Bros. Theatrical, Television, Home Entertainment, Digital Networking Groups, DC Entertainment and Corporate divisions.

As a Senior BI Data Analyst , you will serve as a key liaison with business clients to support their reporting and analytic needs . You will require hands-on experience working in large scale business intelligence and data platforms. You will be working with business clients and vendors to gather requirements, prototype, architect, test, and deliver high quality Business Intelligence solutions. You will be executing test plans, performing quality reviews, supporting operations in an agile environment.

You instill confidence in the solutions you deliver and ensure that the insights provided are accurate, reliable, and easy to digest at all levels. You will work directly with the WB Data Engineering Team to deliver holistic solutions against our many Data Warehouses and our Big Data Platforms.

It's essential the analyst has passion for data and can continuously understand and anticipate the growing business needs, identify areas to where complexity can be reduced, proactively introduce new ideas that help improve process efficiency and leverage data to improve effectiveness across our platforms and business units.

The successful candidate is an innovative individual who can see beyond the obvious, think broadly and looks for opportunities to collaborate with the Business units and internal Technology Solutions Team members.

One of the reasons this position with Warner Brothers interested me was the creative industry it falls in. Entertainment and media can be a very influential field to work with in the sense that, given the right conditions, one can promote the voicing of minority perspectives and opinions and bring awareness to issues that need to be seen.

Regarding the position itself, I found the following descriptions intriguing:

- "...provide insights and enable data driven decisions.

☐ Share Job

- "...working with [] to gather requirements. prototype, architect, test and deliver [] solutions...
- "...the analyst has passion for data and can continuously understand and antici pate [] growning business needs.

This position involves a lot of the larger 'vision' aspects that I find interesting:

- "...a company that puts people first and makes better products at fairer prices."
- "...partner with engineering, product, marketing, operations and other teams to ead data-driven decisions and product design."
- "Identify creative opportunities for machine learning..."

Posted April 02, 2018

Data Scientist

Brandless

San Francisco, CA, USA Full Time

Data Science

Brandless is a new kind of company, a community that puts people first and makes better products at fairer prices.

Everything is just \$3, BrandTax free and sold exclusively on brandless.com. In a sentence: Better everything for everyone, all \$3. Brandless makes hundreds of everyday essentials, aka the stuff you use all the time, including non-GMO food, clean personal care products, non-toxic cleaners and home goods. At Brandless, you can shop your values while getting great value.

What you'll do:

The data team plays a crucial role in the growth of Brandless as we partner with engineering, product, marketing, operations and other teams to lead data-driven decisions and product design. We are excited to reinvent modern consumption and we are the data experts behind our mission.

Data Science at Brandless is responsible for the creation and implementation of algorithms to better serve our customers and optimize our business. You will work on a variety of projects simultaneously (think recommendation systems, logistics optimization, inventory forecasting...) and will work across the full stack - from raw data in the backend to presenting the findings to our leadership team.

The team is growing quickly and each member is uniquely positioned to shape the future of our impact on Brandless. You will have the opportunity to both learn from existing members and mentor your future colleagues.

This position is located in our HQ in San Francisco.

You'll Create Impact By:

- Identify creative opportunities for machine learning and optimization across all aspects of the Brandless business.
- Independently onboard, transform and process necessary data sources to build out models and algorithms.
- Develop and implement algorithms into Brandless production systems, such as our core site or our logistics and marketing systems.

No need to explain why Tesla would be interesting to work for, but helping a company implement products that advance those available on the market, progress ideas about environmental solutions and advance science and thought in general would be gratifying in an existential sense.

- "...utilize advanced data mining techniques, descriptive and predictive analytics, machine learning and optimization algorithms.
- "Develop new tools and metrics for key decision making..."
- "...analyze complex temporal and geospatial data sets." I mean it doesn't get much better than that...

1+ months Data Engineer, Charging Infrastructure - Tesla □Palo Alto, California		
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Apply Now		

The Role

Data is deeply embedded in the product and engineering culture at Tesla. The Tesla Charging Infrastructure team relies on data – lots of it – to optimize our products and global network, improve the customer experience, influence strategy, and build applications to increase efficiency and productivity.

You will join a small, passionate data science team utilizing data to best build a charging network to support fully autonomous transport and a sustainable energy future.

We are looking for a talented and highly motivated data scientist to join as a foundational member of the team and to provide leadership in all areas that relate to analytics and data services. You would embed yourself within cross-functional groups to understand the true business needs and challenges the charging infrastructure team faces as we expand in fleet size, products, and global footprint and lead the resulting projects to completion. You would have the opportunity to utilize advanced data mining techniques, descriptive and predictive analytics, machine learning, and optimization algorithms in order to fulfill Tesla's mission.

Responsibilities

- Develop new tools and metrics for key decision making regarding the expansion and utilization of the Charging Network.
- Support and lead specific ad-hoc needs and projects for the different regions.
- Develop robust and scalable code to analyze complex temporal and geospatial data sets.
- Building applications for internal purposes related to monitoring the usage of the EV Infrastructure network with an emphasis on interactive visualization.

TOP FIVE DREAM COMPANIES:

Finding the right company can take considerable time and effort. As such, I hope to use this program as wisely to give myself as much of a headstart in finding the right company and culture as possible. I plan on networking, asking questions, and researching frequently so I can narrow down the companies I really want to focus on and, ultimately, work for.

1. Starbucks. Given that I actually work for this company already as a barista (and have lived in Italy and lifed for the infamous espresso macchiato), I hope this will give me an edge with any future applications. Not only does it provide customers with a crucial 'nectar of life' also known as coffee, but it is a leader in social responsibility, philanthropy, progressive business philosophies and treats its employees *very* well. It has also led the way with incorporating its app with customer habits - allowing them to use it to pay, reload cards, and mobile order - which has numerous implications for business operations, labor, and customer experience.

2. Bending Spoons. This company focuses on creating sophisticated Apps for its clients. It has a progres-

Our Work Matters

We're business minded and enjoy working on products lots of people actually love using: that's the surest way to profits we know. For us it's exceptionally exciting to know our creations end up in the hands of millions of people all around the world, and that our work matters to

We Seek The Truth

We praise rationality and we value real insight. We're very data-driven and we're skeptical of untested, commonly-held beliefs. We believe in knowledge and relentlessly foster learning and experimentation. Here, you're going to learn at a pace faster than you ever thought possible.

We Disrupt

We get turned on by and always prioritize high-potential, radical ideas. We embrace change and reject the fear of the unknown as a reason for not doing something. Several of our innovations have already been picked up by other companies, and are now gold standard in the industry.

sive culture like that mentioned above at Starbucks and seems as if it values innovation and creativity from its employees (who are considered partners, similar to Starbucks). The company is also based in Milan and I happen to speak Italian. So, there's that. However, it looks extremely competitive, so it will be something to aim for, while not setting my hopes on an offer of employement. (According to their website, they have only hired 46 out of more than 10,000 applicants).

- 3. <u>Ryan Solutions</u>. While this corporation focuses on the hospitality industry, which is not my first choice of industries, it is located in the exact location I would want to work in and would give me a place to cut my datascience teeth. I was networking with a friend the other day who knows someone who works there, if I remember correctly, and mentioned it to me, so I plan on going in soon to introduce myself.
- 4. Pew Research Center / The Advisory Board Corporation: After having worked in a few think-tank/research institution settings, it would be great to find a company where I could incorporate this experience with data science. Both of these institutions focus on research which procures and reveals insights for the progress of higher education, social understanding and literacy in its various forms. I have interview with the Advisory Board once and really enjoyed learning about the company. It would be great to join one of these companies' teams.
- 5. Start my own company. I aim to gain experience with another corporation first, but I have always been interested in the thought of starting my own company. Ideally, it would be an entity focused on providing research that would better the community and its understanding of current issues, further educational and literacy pursuits and creatively explore new areas of research with the hopes of bringing light to new and insightful perspectives.

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After taking a look at my LinkedIn connections, it seems as if I have more connections within the industry than I thought:

- One person works as a full-stack developer for Sling TV (2nd Connection).
- Another works as a Big Data Analyst for Arrow Electronics.
- There are also some people that I met in grad school who I could reach out to inquire more about their take on the industry/possible connections/etc.
- There are two people in digital marketing that live and work locally who I met recently. I plan to add them on LinkedIn as soon as possible.

People / Events

I found two people with positions I found interesting on LinkedIn - one who works for Starbucks and one who works for Bending Spoons:

- 1. Marco Meneghelli is a 3rd connection at Bending Spoons and works as a Big Data Analyst for them. His background is in physics and is pretty impressive (worked for CERN and INFN as a physicist). It looks like he works with data from mobile apps and data regarding "customer behavior." After looking at his profile further, it looks as if I have multiple 3rd connections at Bending Spoons that I can research in the future.
- 2. Jared King is a 2nd connection and works as a Data Analyst at Starbucks. He has a Master's in Information Science from UNC Chapel Hill and has worked previously as a consultant with a few companies before moving onto Starbucks. It looks like he is connected to a good friend of mine from Baltimore and it would be neat to get in touch with him.